THE CAMBRIDGE ECONOMIC HISTORY OF INDIA

General Editors: Dharma Kumar and Tapan Raychaudhuri

Volume I: *c*, 1200–*c*. 1750

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edited by
TAPAN RAYCHAUDHURI
Reader in Modern South Asian History, University of Oxford, and Fellow of St Antony's College

and
IRFAN HABIB
Professor of History, Aligarh Muslim University

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PREFACE

The first volume of *The Cambridge History of India* was published in 1922. Explaining its *raison d'être*, the editor, Professor E. J. Rapson, referred to the vast accumulation of knowledge on Indian history and the consequent need for an authoritative summary. As the history of that project later revealed, the knowledge transmitted contained serious gaps. In particular, the series devoted hardly any attention to economic and social history. On the other hand, it is now recognized that *The Cambridge History of India* was more than a précis of existing knowledge. Its contributors not only added to the existing stock of information; but their interpretations, in spite of limitations of the set framework and the kind of bias inseparable from the times, also provoked further reflection and research.

Projected more than half a century later, the present volume shares some of the concerns of that work. In planning it, the editors have had in mind a dual purpose: a statement of the existing knowledge and the initiation of enquiry into areas which still await research in any depth. Broadly speaking, the economic history of India in the sixteenth and seventeenth centuries is now better investigated than that of the earlier centuries or the first half of the eighteenth. The most extensive discovery and analysis of source material in recent years relate in fact to the seventeenth century. Again, we know much more about agrarian relations and aspects of manufactures and foreign trade than about agriculture, inland commerce, population or prices. Area-wise the northern part of the sub-continent is more intensively researched than the southern. In the case of the south, the researchers have been concerned more with the period down to the fifteenth century than with later developments. The gaps in our knowledge remain large and numerous. Given the nature of the known source material, some of these may never be filled. Quantitative data remain, and are likely to remain, scarce except for certain aspects of agrarian or trade history.

Despite such limitations, it was considered worthwhile to undertake this project for a number of reasons. Though Moreland's two pioneer studies of the Indian economy in the Mughal period were published in

1920 and 1923 and Dutt's survey of the colonial economy came some two decades earlier, the economic history of India for long remained a peripheral feature of Indian historiography. The two volumes of the *Cambridge History of India* which deal with the same period as our first volume, contain between them only one chapter that deals with economic life: even there the theme is the system of land revenue, which is equally an aspect of administrative history. Other series of histories of India have contained chapters on the economy; but there is usually no more than one short narrative for each 'period'. Political history, if not dynastic annals, continues yet to claim a disproportionately large share of attention in these collaborative efforts. It is, however, fair to say that such preferences do not correspond to the major concerns of current historical research in India, which has now begun to lay considerable emphasis on economic and social history.

Our knowledge of the Indian economy in the pre-colonial period has, indeed, come a long way since the publication of Moreland's studies. Interest in the subject, too, is no longer confined to India and Britain. The countries with an already established tradition of research on Indian economic history include the USA, the USSR and Japan. Besides the substantial volume of monographs and articles on the subject, there is a steady stream of dissertations most of which remain unpublished. In conferences and seminars, basic disagreements on the nature of India's pre-colonial economy, its particular features and its dynamics of change have often been expressed, though these are not fully reflected in the readily accessible published material. Areas in which fresh research is lacking also look very different in the context of new perspectives.

In view of all this, it seems no longer premature to attempt, through collaborative effort, a history of Indian economy embodying much of the results of recent research and stating or defining the issues that are the subjects of debate. The project necessarily implied a certain amount of fresh investigation, especially on the pre-Mughal period and southern India generally. Even a tentative statement in these fields would be a useful starting point. The depth of information and analysis in different parts of this volume naturally varies in proportion to the quantum of accumulated knowledge bearing on the relevant themes. What has seemed surprising to the editors is the degree of agreement that the contributors have reached, quite independently of each other. The contributors also share, though in only very broad terms, a common approach.

With Moreland the major concern was to compare national wealth and income in India at the death of Akbar with early twentieth-century British India. He proved to his own satisfaction that the poverty-stricken economy of India under Britain was still an improvement, however

small, on the age of Akbar in terms of per capita output and consumption. Research on the economic history of pre-colonial India is no longer confined to this depressing comparison, important though it is, for understanding the slow pace of the economic development of modern India. Contributions to this volume are chiefly concerned with queries that lie behind the question Moreland posed – these relate to the structure and dynamics of economic life under a system of relations of production very different from those subsisting after the British conquest. If our investigation occasionally takes us beyond the temporal and spatial purview of this volume for purposes of comparison, the sole object is to better understand the nature and causation of the processes at work.

Given this approach, and given too a large area of agreement as to facts, the contributors still differ among themselves on the significance or implication of particular developments and the impact of specific phenomena on the economic process. The consequences of the European companies' trade and of the Mughal revenue system, for instance, have been assessed differently by different contributors to this volume. Such discrepancies, which reflect the current state of debate, have been allowed to stay. As the differing analyses often derive from identical data, there has to be some amount of repetition as well; and that too has been allowed to remain so as not to disturb the flow of the individual contributors' arguments.

This volume covers the so-called period of Muslim rule in India, identified by some as India's Middle Ages. The relevance to economic history, of this somewhat anachronistic chronology, as well as its division into two halves taking the establishment of the Mughal empire as a watershed, can legitimately be questioned. The issue of periodization in India's economic history has not yet been adequately faced. Continuity rather than change characterized most aspects of economic life over very long periods and the view that drastic or far-reaching discontinuities belong only to the colonial era cannot be discounted altogether. Monographs dealing with cross-sections of economic life have generally accepted the chronology of political history or simply referred to the relevant centuries to indicate the temporal limits of their enquiry. Questions as to whether the economic phenomena discussed in such works differ significantly, if at all, from their counterparts in proximate epochs are seldom raised. The validity of the dates appearing in the title of a volume is simply assumed. Often the only justification for them is that the sources consulted belong to the time in question, even though material from a different century would tell an identical story. To repeat, there can be very valid objections on such grounds to the dates delimiting the period covered in this volume – *c.* 1200 to 1750.

Organization of the rural economy, agriculture and manufactures, the techniques of production and the commodities produced, and the relative weights of the different sectors of production are marked by no dramatic discontinuities around those two dates or when Bābur won the first battle of Panipat (1526). The special irrelevance of these dates to the economic history of south India is discussed by Professor Stein in his contributions to this volume.

Despite the dominant continuities, however, the period from the thirteenth to the mid-eighteenth centuries has some special characteristics which mark it out from those which precede or follow it. To measure the importance of these distinctive features we need to adjust some familiar yardsticks. It is certainly a reasonable hypothesis that until India was drawn into the network of the international economy by the process of colonization, changes in her economy could not have been as extensive or fundamental as those that now took place. On the other hand it, too, cannot be ignored that changes which occurred from time to time in earlier times were linked to some deep-going alterations in the organization of state power, or to shifts in the country's commercial relations with other parts of the world, or again to slow and largely invisible developments in the technology of production. Political and administrative changes often implied redistribution of claims over land or its produce, administrative unification of extensive areas or, conversely, fragmentation of authority. These, in their turn, could affect the incentives to production, investments in the infrastructure, urban development as a corollary of efforts at centralization and, through changes in the level of peace and security, the flow of trade between the different parts of the sub-continent. Growth of exchange and the beginnings of an integrated market were possible results of the last-mentioned development. Changes in foreign trade affected the fortunes of the Indian merchants in different ways: their income and wealth as well as their sphere of activities were in fact affected by the patterns of competition and collaboration with the traders from abroad. Increased demand for exports pressed on the productive resources possibly inducing modest changes in organization, technique and composition of trade. An increased flow of specie could produce an inflationary trend with some of its familiar consequences. At times such changes were in the nature of long-term fluctuations rather than permanent discontinuities; but even where the former was the case, an assessment of the relevant phenomena is of use in determining the chronology of India's economic history.

Thus the movement from one period to another before British rule, consisted of changes within a broad framework of continuity in the fundamentals of economic life, but noticeable still through a series of

changes in administrative organization, commerce, and technique and productivity. Only in terms of this modified view of historical change can the scheme of periodization accepted for this volume be justified. Further, even the limited breaks with the past were often more true of some parts of the sub-continent than of others; there were few wide-ranging changes affecting all parts of the territory. In this, of course, the economic history of India is not very different from that of other countries. The identification of important new developments in a significantly large area justifies the demarcation of a 'period' for the region as a whole.

For northern India and the Deccan, the emergence and domination of the Delhi sultanate marked a very clear break with the region's political past and introduced innovations of profound importance in its cultural history. By all standards, the economic consequences of the conquest, too, were more than skin-deep. The conquest, according to the current consensus, came at the end of a long period of economic decline. The process of conquest appears to have caused initially further disarray. The innovations which mark out the history of the sultanate as a distinct phase in India's economic evolution include a number of features: the successful creation of a military power sustained by the regular extraction of resources from an extensive territory; the emergence of a new ruling class with direct claims over shares of the produce; a proliferation of urban centres as an expression of the life-style preferred by the immigrant rulers; and the growth of a small range of new manufactures, such as paper and lime mortar; and the introduction of some new technology. The creation of a unifying state based on military power undoubtedly had precedents in the country's history. But the Delhi sultans' success in this endeavour excelled nearly all earlier efforts, and coming in the wake of a long period of political fragmentation, signified radical change. For the economy, its main consequences were linked to the level of revenue assessment and the evolution of the *iqṭāʿ-jāgīr* system. Taken together with the other innovations, these features constitute a cluster distinct enough to justify the demarcation of a period in terms of the broader view that we have urged.

Timur's invasion towards the end of the fourteenth century marked the effective end of Delhi's control over territories beyond its immediate neighbourhood. Beyond the fact that it terminated the centralized system of revenue extraction for maintaining a vast military machine, the event was probably of no great significance for the economy of India. Significant economic developments began again in the sixteenth century, largely owing to the emergence of a new empire, qualitatively different from its predecessor, and (to a lesser, but indeterminate extent) the expansion of commerce with Europe.

The centralized authority created by the Mughals had manifold implications for the economic life of the Indian people. The machinery for revenue extraction was now streamlined, making available to the state fabulous resources which, lavishly expended, created a vast market for luxury manufactures and stimulated urbanization, reinforcing a trend implicit in the growth of centralized authority. The collection of revenue in cash helped to bind the remotest peasant to the network of exchange. The mass of producers were almost certainly impoverished, with revenue demand geared to as much as half the gross produce. But the beneficiaries of the exploitation included the rural élite who, in the declining days of the empire, began to emerge as landed proprietors, anticipating developments of the colonial era. The Mughal peace rendered possible a very substantial expansion in inter-regional trade, anticipating the emergence of an integrated market.

In foreign trade, the early phase of Panikkar's 'Vasco da Gama era' had consequences which went beyond the commercial sphere. The Portuguese intervention in the Asian trade may, or may not, have added to the net volume of India's exports, but it surely ended the age of Arab hegemony in the Indian waters, introduced unheard-of restrictions on the freedom of the high seas and opened the way for the economically more formidable European nations, represented by their East India Companies. In course of time the latter's trade contributed to an undoubted increase in the absolute volume of India's exports and imports, stimulated Indian participation in overseas commerce and induced some positive developments in the manufacturing sector of the economy. The increased flow of specie raised the general level of prices in the country; the nature of the impact of this phenomenon on Indian economy needs to be carefully analysed. Perhaps more important in the long run was the fact that out of the European participation in India's trade emerged the future colonial system. First came the desire in each European Company for exclusive control over India's oversea trade and, at a later stage, the ambition to draw 'investments' or purchases in India from the country's own revenues. This was the major factor in the quest of empire that developed with such vigour around the middle of the eighteenth century.

The political economy of the Mughal empire and of the European trade with India clearly mark out the age of Mughal rule as a distinct phase in the country's economic history. By the mid-eighteenth century, the Mughal empire was in ruins. Its collapse contributed to the emergence of new forms of proprietary rights in land, while war and anarchy at least partially disrupted the network of inland commerce. Around the same time the competitive phase in the trade of the European companies was coming to a close: the commercial hegemony

of the English East India Company became well established by 1757, partly through larger financial power, and partly through war. The fifties of the eighteenth century did not only witness the beginning of a new era in the political and the economic order that went with the foundation of a colonial empire. They saw too the rapid disappearance of those distinctive features of the economy of Mughal India, that had been so clearly articulated in the seventeenth century.

The rise and fall of the Delhi sultanate is no doubt of little direct relevance to the economic history of India's south. But events which affected the bulk of the country had their implications for the south as well. The immense expenditure of resources on military preparedness in the Vijayanagara empire was largely a response to threats from the north. Yet, until the substantial increase in trade – both inland and foreign – during the Mughal period accentuated the mutual dependence of the different regions, southern India remained relatively isolated. By the seventeenth century, this isolation was seriously breached. The partial dependence of southern Coromandel on Bengal for the supply of rice and other food stuffs is perhaps the most interesting evidence of this breach. The price of bullion in the south, too, was affected by the level of demand in the north. The commercial organization of the European companies bound it with other regions into a single supply network: when the production of textiles in Gujarat suffered as a result of famine in the 1630s, the Companies' investments were shifted quickly to the eastern coast of the peninsula and Bengal. If the thirteenth century has relatively little significance as the beginning of a new epoch in the economic history of southern India, the discreteness of the Mughal age as an epoch in the economic history of the sub-continent as a whole is less open to question.

For the pre-colonial period, research into the economic history of different regions has hardly begun. This fact is necessarily reflected in the planning of the present volume: the focus here is on the sub-continent as a whole, on the uniformities rather than the diversities and on the forces which affected the course of economic life in the greater part of the territory. Since such an approach may do injustice to three important regions that have followed partly autonomous lines of development, the present volume seeks to provide separate treatment for each of these regions. The south has separate chapters devoted to it throughout. The availability of processed data which refer specifically to Maharashtra also makes it worthwhile to consider the distinctive features of the region's economic evolution. An appendix treats Assam, a region which remained largely isolated from the rest of the country for most of the period covered in the volume.

The system of footnotes adopted here departs somewhat from the

system followed in other Cambridge Histories. Statements based on easily accessible secondary works have not usually been supported by detailed references. On the other hand, full references are sought to be provided when the text offers results of research or interpretation published here for the first time. Diacritical marks have been used for all non-English words except the familiar place-names. A major problem in the presentation of this volume is that it is difficult to achieve standardization between different languages with differing accepted systems of transliteration, combined with the degree of anglicization customary in the discussion of the subjects and the areas. We decided to respect the contributors' preferences in the matter of transliteration even though this meant a lack of uniformity in spelling.

It has not been found practicable to furnish a separate bibliography for each chapter. Repetitions would have enlarged the bulk unduly, or, were this avoided, the reader would have had all the time to shift from the bibliography of one chapter to another in the pursuit of cross-references. The arrangement actually followed in our bibliography is explained in a note prefacing it at the end of this volume.

While introducing a volume in another series of Cambridge Histories, the editor claimed that it would stand, 'if need be for years, if need be alone'. Our expectations are far more modest. We only dare to hope that our collaborative effort will stimulate discussion and help create new knowledge which may replace before many years the information and analysis offered in this volume.

TAPAN RAYCHAUDHURI
IRFAN HABIB

CHAPTER I

THE GEOGRAPHICAL BACKGROUND

It is a little awkward to use the name India for the entire territory of three independent states. But India in the larger sense, comprising Pakistan, India and Bangladesh together, is still a valid geographical expression. The region containing the three countries is separated from the land-mass of the rest of Asia by the highest mountain ranges in the world. From the Himalayas, lower ranges run down, on both flanks, west and east, in practically uninterrupted series, down to the sea. The sub-continent enclosed by these ranges and the sea, approximately between latitudes 8° N and 37° N and longitudes 61° E and 97° 30′ E, contains two broad physical divisions, the Indo-Gangetic plains and the peninsula.

The Indo-Gangetic plains are formed by a broad belt of alluvium of varying width, swinging from west to east in the shape of a rough crescent. The plains are themselves divisible into two great sections dominated respectively by the two river systems of the Indus and its tributaries and the Ganga and Brahmaputra and their tributaries. With the exceptions of a few rivers like the Chambal and the Son, the sources of the major rivers flowing in the plains lie in the Himalayas. In this zone, the eastern portion is the area of heavy rainfall, and as one goes west, the rivers become increasingly the major source of irrigation. Where they fail, the land becomes absolutely arid as in the Thar, the desert of Sind and western Rajasthan. The Indo-Gangetic plains cover less than a third of the area of the sub-continent, but contain well over half of its population. Broadly speaking, the density of the population in the plains tends to be the highest in the areas of heaviest rainfall, where rice cultivation is accompanied by lush vegetation.

South of the plains, lies the peninsular block (central India, Deccan and south India), consisting of series of hills, scarps, plateaus and valleys, interspersed with some sizeable stretches of alluvium, notably, the Gujarat plains, Orissa, coastal Andhra, Tamilnadu and the Kerala coast. Population tends to be dense in these alluvial tracts, but scantier in the remaining areas. In general, the peninsular block creates far more distinct geographical sub-regions than can be identified in the northern

plains. Much of the relative ease by which large empires could arise and unite the plains, and the difficulty they faced at the same time in subduing or controlling the peninsular territories, stemmed from this simple geographical difference.

RIVERS AND FORESTS

One naturally takes physical geography as practically fixed and unchanging in historical times. From time to time, suggestions have been put forward about changes in rainfall or the configurations of the coastline. Raverty in 1892 suggested a retreat of the monsoon from the area of southern Punjab, not merely since Alexander's invasion, but even since Tīmūr's (1398); the thesis was painstakingly contested by I. R. Khan in a little-known work.[1] Similarly Cousens, an archaeologist, freely argued that a thousand years ago Thatta in Sind was practically a sea-port; and he showed on his map an immense stretch of space that the sea has since then lost to land.[2] All this, after Haig had already shown that given the volume of the silt discharge of the Indus, its delta along its entire line cannot have advanced a net amount of more than four yards a year.[3]

While one must always be cautious in suggesting radical alterations in rainfall or the coastline over short periods, there are other aspects of physical geography where caution would conversely dictate that a change must be assumed, unless there is proof to the contrary. Such is certainly the case with the courses of rivers in the alluvial plains.

To take the Punjab rivers first, the Sutlej and Beas have had relatively firm channels (though the Sutlej has shifted from its close proximity to Ludhiana in the sixteenth and seventeenth centuries) down to their present junction. But until the seventeenth century, the united stream redivided into two separate rivers; and survey sheets still show abandoned channels of 'the Beas' which run at a great distance to the north of the Sutlej and turn to re-join the Sutlej only after reaching a point directly south of Multan. The separate channels of the two rivers were crossed by armies in the eighth and fourteenth centuries, as well as in the seventeenth.[4] The Ravi, until the fourteenth century, ran past Multan, and met the Chenab at a point to its south.[5] It was, however, flowing in its present lower bed, the Sidhnai reach, by the time of the *Ā'īn-i Akbarī*, when it met the Chenab well to the north of Multan,

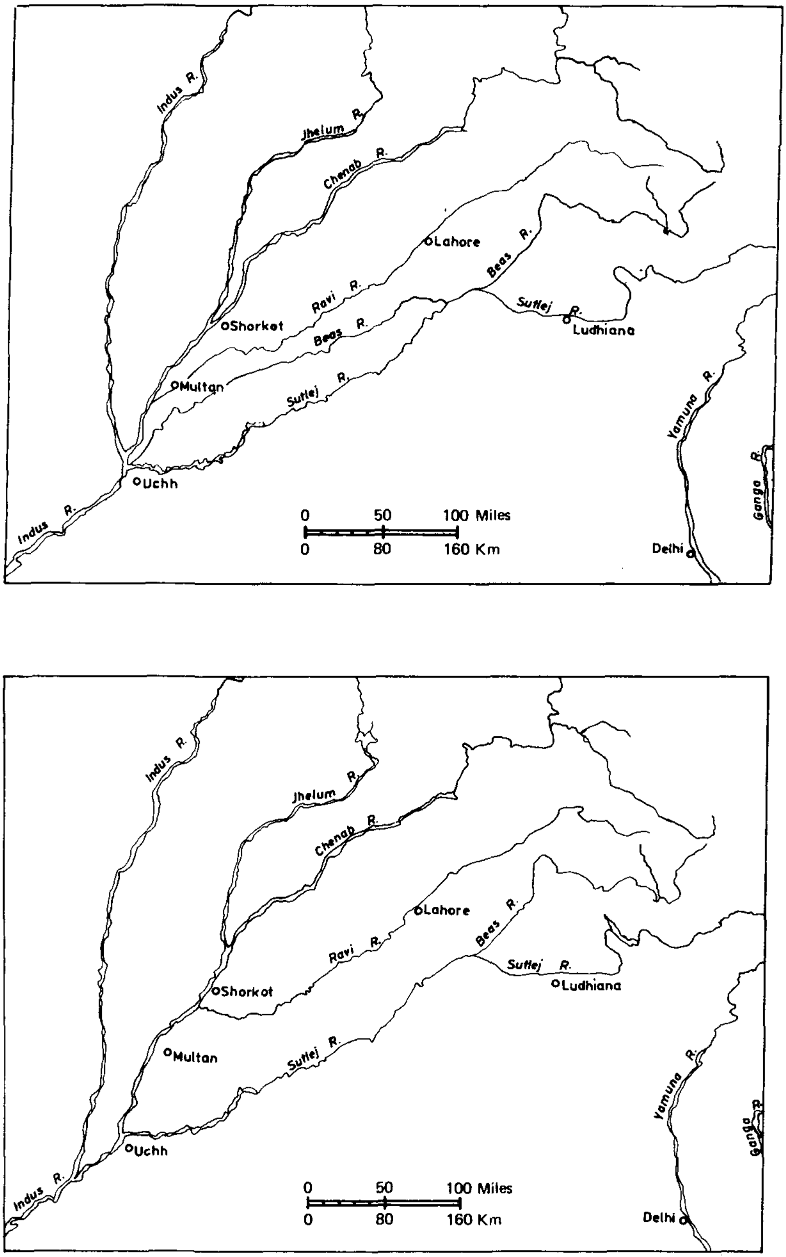
[1] Khan [379], I, No. 2, 185ff.

[2] Cousens [276], 124, and map, plate c, III (inset).

[3] Haig [354], 7.

[4] Kūfī [134], 33–6, 235–7 (both channels are called Beas); Yazdī [144], *Ẓafarnāma*, II, 58–9, 61, 67; Kāẓim [161], *'Alamgīrnāma*, 271–2.

[5] Kūfī [134], 36, 237; Māhrū [5], 111; Yazdī [144], II, 54, 179.



Map 1 Punjab: rivers, (a) 1400, (b) 1970

not far from the present junction. In Sind, the Indus, running in an elevated bed of its own creation, crossed the low hills at the Sukkur-Rohri gap, and this point has remained more-or-less fixed at least since the thirteenth century, when Bhakkar (an island in the river at this point) appears as an important fortress. But south of it, the Indus has altered its course most freely, and in the Mughal times its main stream ran well to the east of the present town of Hyderabad.[1]

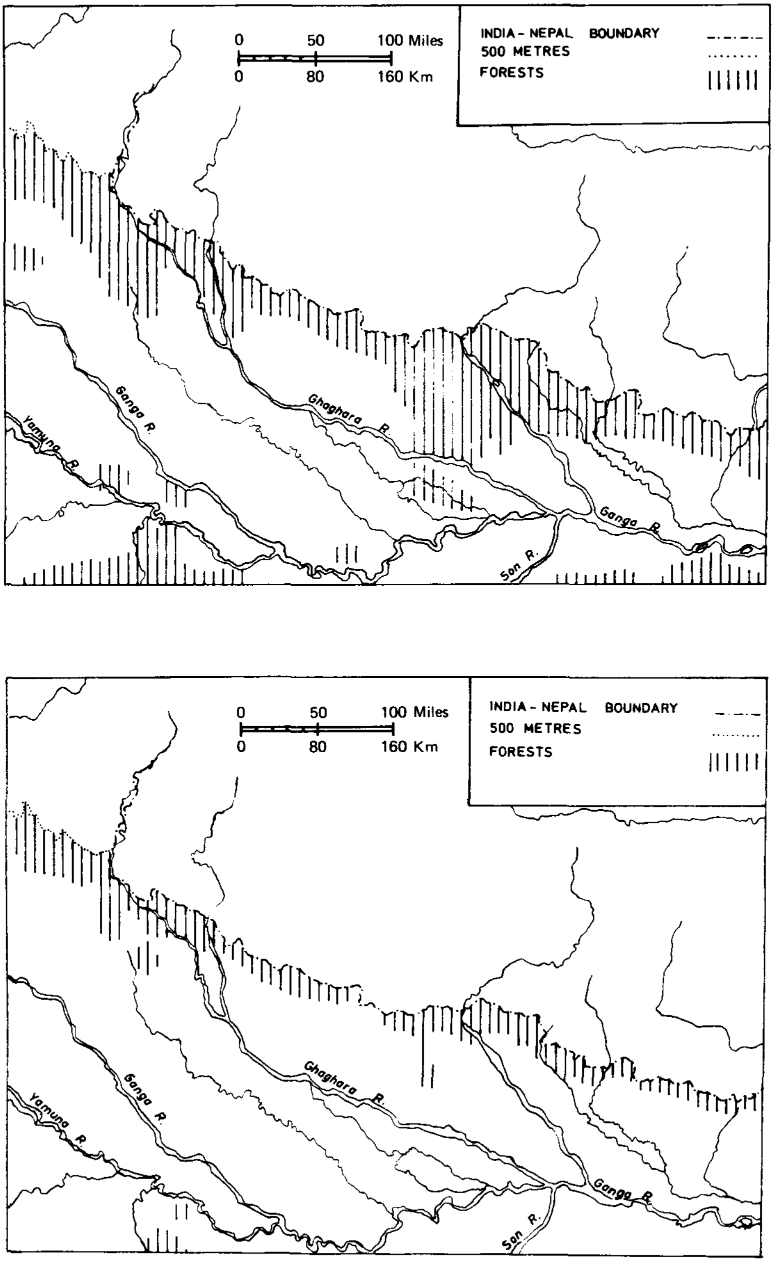
In the Gangetic basin, similar changes have occurred. Until *c.* 1595, the Sarju river still met the Ghaghara river at Awadh (Ayodhya), having already taken the waters of the Kauriala.[2] In Bengal, the Tista did not then flow into the Brahmaputra, but adopting a directly southern course (the bed of the so-called 'Jamuna' river) used to flow into the Ganga.[3] The Brahmaputra river made a large bend eastwards after its entry into Bengal; this channel carried its main stream well to the east of Dacca, when Rennell mapped it as late as about 1780.[4]

The great shifts in river courses greatly affected the economies of the regions they abandoned, especially when this happened in the more arid western zone. Thus the desiccation in Haryana seems to have come in cycles depending upon the ability of the Yamuna to feed the Chitang. It apparently fed that river in the seventh and eighth centuries, when a 'stream of Hansi' is mentioned.[5] But by the mid-fourteenth century, the entire tract was arid and waterless, and revived only when Fīrūz Tughluq (1351–86) cut a canal from the Jamuna and carried it to Hansi and Hisar.[6] A large tract in southern Sind was said to have become utterly desolate owing to a change of course by the Indus river.[7]

There seems little doubt that before the modern railway embankments, canals, dams and bridges succeeded in 'training' such a large number of rivers, the appearance of the hydrographic map of the north Indian plains must have been vastly different from what it is today. For one thing, the flood channels, often the main river-beds of a bygone age, were far more numerous; so also lakes and swamps. Canals and electric pumps have shut off or greatly reduced water in the old channels, and considerably lowered the water-table. It is also likely that owing to a larger extent of forest, rivers rising in the Siwaliks and the Terai might have had a steadier supply of water than is the case today when deforestation enforces a quick drainage of water and loss of moisture in the sub-montane tract.

This brings us to the subject of ecological environment. How rapidly

[1] Haig [354], 95–6, 118.
[2] Abū'l Fazl [123](1), 433.
[3] This is implicit in the reference to Jamuna as a great river in Abū'l Fazl [151], III, 448.
[4] Rennell, *Bengal Atlas*, Maps 6, 12, 17 and 18 (1779–81).
[5] Kūfī [134], 51.
[6] 'Afīf [143], 125–8.
[7] 'Nisyānī' [153], ff. 12a–13a.



Map 2 Middle Ganga Basin: forests, (a) 1600, (b) 1950

forest has retreated in the northern plains can be seen by comparing the forests marked in Rennell's maps of around 1780 with those in modern maps. Even by Rennell's time, several earlier forests had been cleared; one can restore them on the map by drawing upon earlier sources. The presence of wild animals, such as elephants or tigers, recorded in areas where no one would dream of observing them today, illustrates the great change that has taken place in the last 700 or 800 years. In the thirteenth century, a traveller crossing the middle Doab faced some danger from tigers.[1] The Doab in the thirteenth century almost certainly had pockets of jungle and forests, connected with the sub-montane forests by ravines and jungle running along the Yamuna and the Ganga. Similarly, elephants could only have roamed about the Rajpipla forests of Gujarat in the seventeenth century if there was an unbroken belt of forest extending to Malwa.[2] But some time before 1761, human settlements had cleared the intervening ground and so barred the entry of elephants from central India.[3]

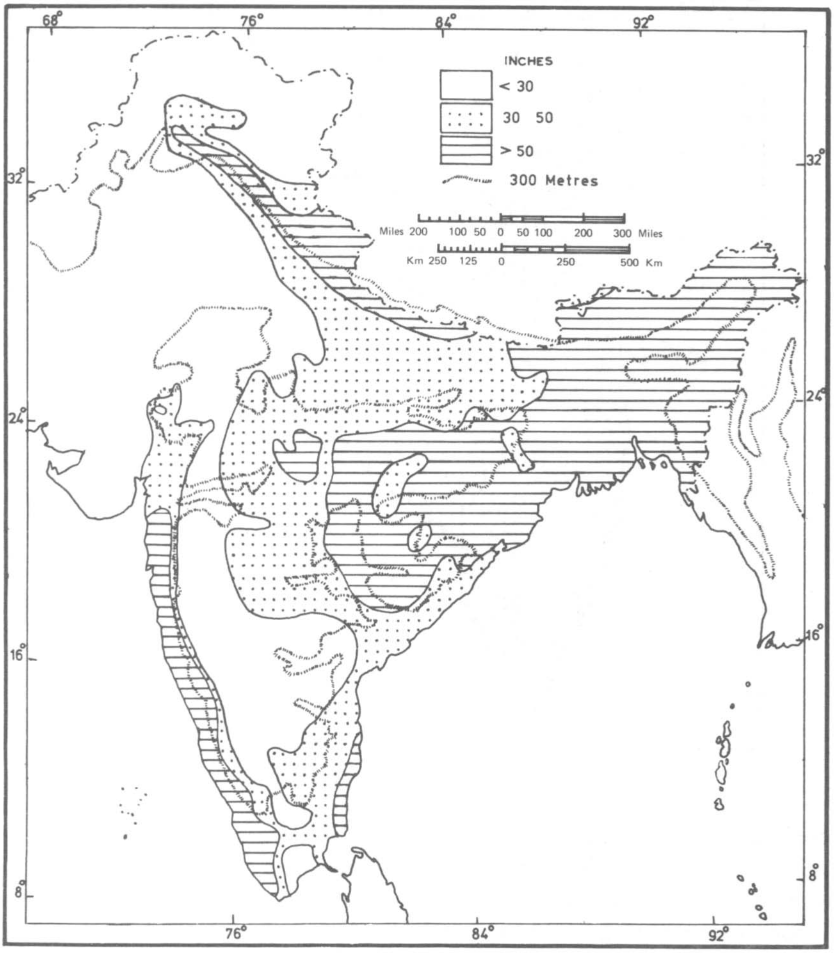
In the Indus basin too, flood channels and swamps created large stretches of jungle. The most noticeable was the Lakhi jungle around Dipalpur, situated between the two long arms of the Sutlej-Beas river.[4] It has now been obliterated by the canal colonies.

The larger extent of forest in medieval times had naturally important consequences: a larger supply of fuel and timber for building (including boat and shipbuilding); larger pastoral grounds; and, finally, a favourable land: man ratio, making possible a larger extent of cultivation, per capita, and inducing shifting cultivation in certain areas. More extensive forests probably contributed through transpiration to marginally larger rainfall as well – but whether the difference could ever have been significant, is questionable.

DISTRIBUTION OF POPULATION: TOWNS

A larger expanse of forest meant a smaller population. The point at issue would be, how small was the population at a particular time? Another important question is, how was it distributed? Until an advanced stage of industrialization is reached in a country, the distribution of its population is likely to be governed by agricultural productivity. Availability of water being still the major factor behind productivity per acre, the distribution of rural population in India in the plains conforms very broadly to the distribution of rainfall. There are exceptions, it is true, such as regions where canals and tanks offer

[1] Malik, ed. [3], 254.
[2] Lāhorī [157], I, i, 331.
[3] *Mir'āt-i Aḥmadī* [167], I, 214.
[4] Bhāndarī [162], 63.

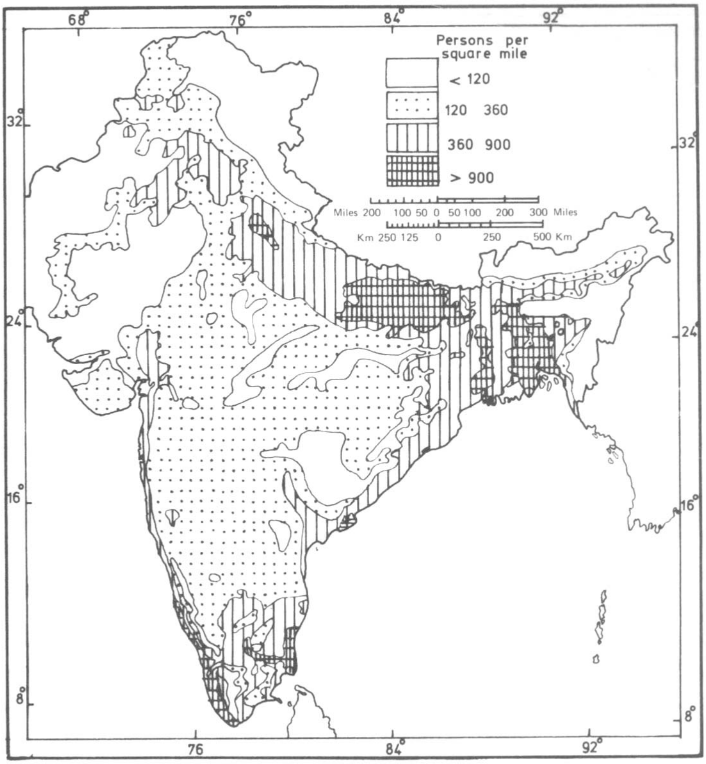


Map 3 Average annual rainfall

alternative sources of water supply;[1] but these do not substantially affect the main pattern. If there was any variation in medieval India from the present state of relative density of rural population, it might have been owing mainly to the fact that some very large tracts in the zone of medium or heavy rainfall (e.g. the Mughal *sarkār* of Gorakhpur) were under dense forest and so were lightly populated, in spite of the rich harvests attained in the clearings.

The distribution of urban population is affected by much more

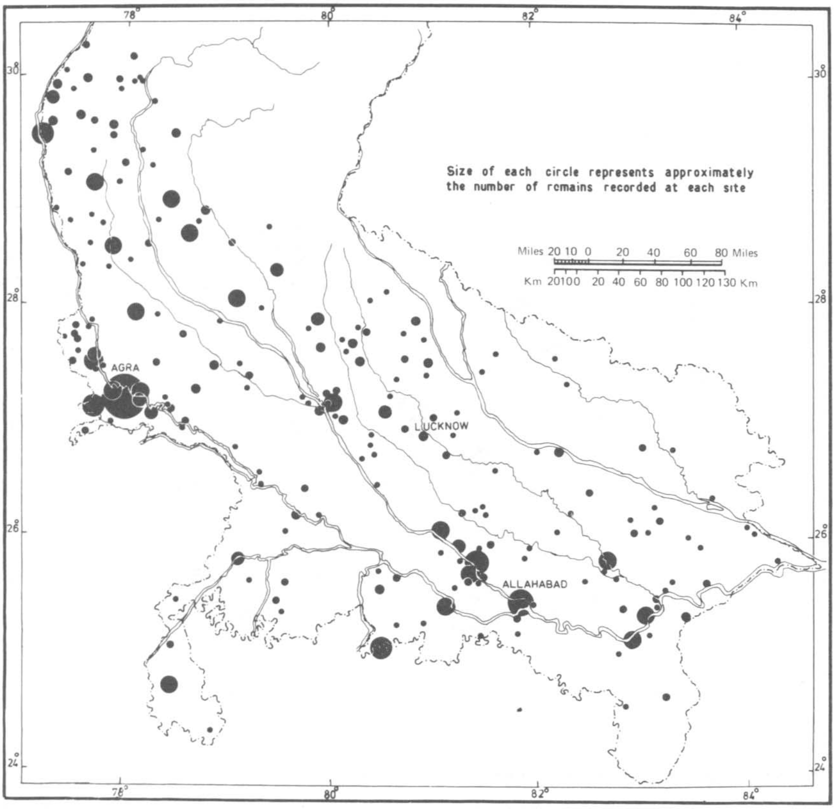
[1] See Spate [517], for a useful survey of density of rural population, 121–7.



Map 4 Rural population density, 1961

complex factors; and one is tempted to think that changes here have been very considerable: the railways, mines and factories have created new and massive urban concentrations. An attempt has been made to reconstruct the geographical distribution of medieval urban settlements in Uttar Pradesh from archaeological remains by assuming that the number of buildings at any place is a fair index of its size.[1] When compared with the distribution of sites of towns of 10,000 and above in Uttar Pradesh as counted by the 1881 census, one notices that towards the west and north-west of the province, towns are located close to each other in the Mughal period as well as in 1881. They are rather sparse in both periods in the north-eastern parts of Uttar Pradesh. This is in spite of the fact that in 1881 these districts were very densely populated. Elsewhere, the pattern of distribution shows considerable local divergences, and correspondence between the two periods becomes difficult to establish. It would seem, then, that at least some districts have

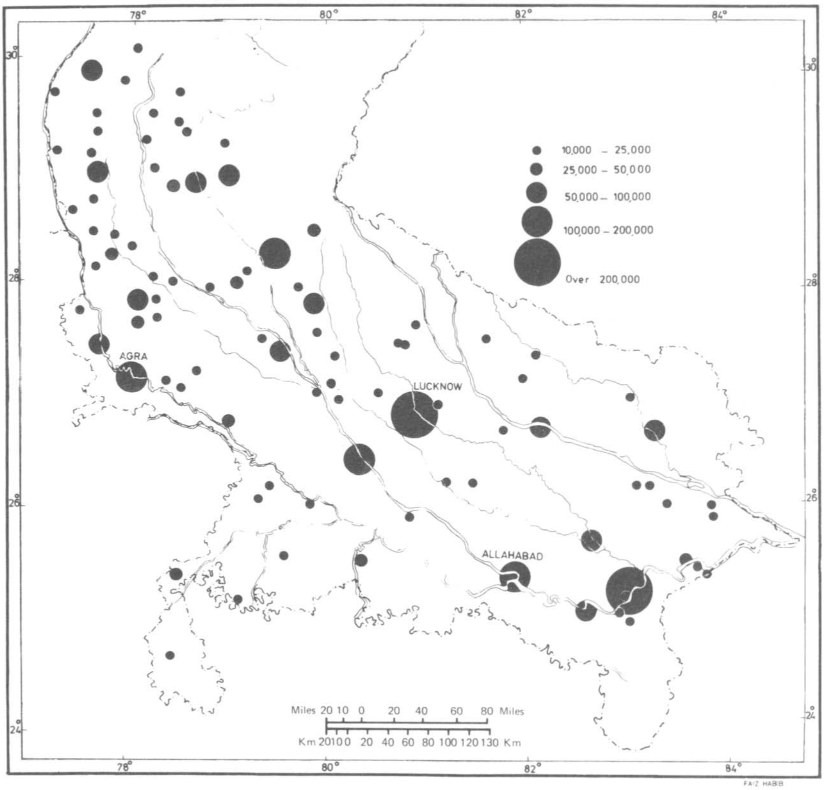
[1] Khan [381b]. I prepared a map based on Mughal archaeological remains in Uttar Pradesh recorded by Führer: a small-scale adaptation of this map appears as Map 5.



Map 5 Archaeological remains in Uttar Pradesh, sixteenth and seventeenth centuries

preserved a higher degree of urbanization for four centuries; while others have shown a similarly consistent tendency towards a lower degree of urbanization. The reasons for such regional peculiarities remain unclear.

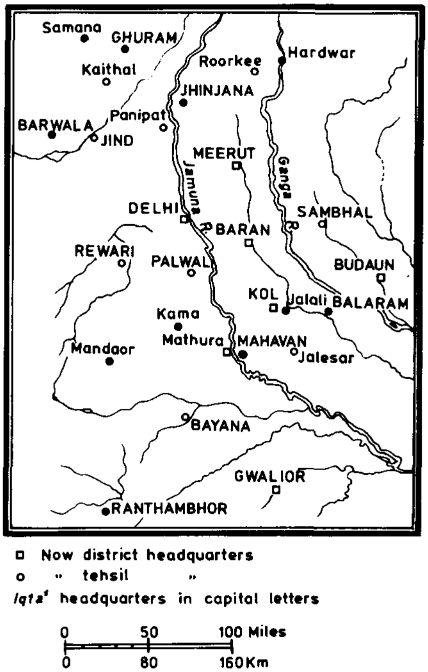
There was once a fashionable theory (after Bernier), which is still resurrected occasionally, to the effect that Indian towns were unstable, being mere camp-cities that fell into ruin the moment royal caprice or policy directed that the military camps shift elsewhere. But it seems that even in the alluvial plains, towns have clung tenaciously for extraordinarily long periods to the same sites. The firm position of Delhi may be explained by geography: here the outcrop of the Aravallis in the form of the Ridge reach up to the Yamuna river, and divert it from its natural westering course to the east, towards the Ganga. Command over a natural source of building stone, high ground for sites of forts, and



Map 6 Uttar Pradesh: towns by population, 1881

facility of river-borne trade, are combined with a position in the middle of the north Indian plains, where they narrow to some 150 miles.[1] Other towns, like Prayag-Allahabad or Ayodhya-Faizabad, stand (or once stood) at confluences of rivers, thus being in fact junctions of two river-routes. In the case of the latter city, though the confluence no longer occurs, its disappearance, owing to a shift in river channels, is a matter only of the comparatively recent past. Even when no geographical factor is present, mere successive human habitation creates a very good reason for the same site being settled and resettled. Higher ground between two depressions caused by old river channels was probably often the main attraction for the original settlement. But in the course of time, human habitation went on raising the ground level until a large mound or series of mounds came to be created. Their presence then strengthened the inducement for the settlement to remain where it was – on steadily rising ground. It is practically certain that

[1] Cf. Spate [517], 179.



Map 7 Administrative centres, thirteenth century

towns like Lahore and Multan, in the Punjab or Meerut, Baran (Bulandshahr) and Kol (Aligarh) in the Doab, to name a few at random, have remained firmly established for this reason, if for no other. But then, there are cultural reasons too: Mathura, Ayodhya and Varanasi (Banares) are holy cities, and being pilgrim centres, they must at all times have had considerable populations.

How the same urban settlements have continued to be important in the alluvial plains is illustrated by the map we offer of the Delhi-Doab region, showing *iqṭā'* headquarters, *c.* 1260, with such places among these marked as are still district or *taḥṣīl* headquarters.

Outside the plains, the sites of towns would usually remain still more firm. The gap in the Aravallis ensures that Ajmer must at all times have been a garrison town and commercial market, even if the shrine of a saint were not there to make it a pilgrim centre as well. The isolated hill just standing south of the Balaghat plateau wall makes Devgiri-Daulatabad such an ideal fortress that it seems certain that a town must always have nestled under it.

ROUTES AND PORTS

It is often not clear whether a town arose because a commercial route passed a particular point, or whether a route went through that point because there was a town standing there. Trade routes certainly altered and shifted as certain towns became less or more important; and a shift, once made, would affect the fortunes of other towns on the route as well. An interesting illustration of this is offered by the shifts in the trade route, which, passing though the Punjab, joined Delhi with markets in Afghanistan.

In the fourteenth century, the route from Ghazni and Kabul went to Multan, and from there ran across southern Punjab and southern Haryana to Delhi.[1] In the seventeenth century, however, the two routes from Afghanistan joined at Lahore: one from Kabul via the Khyber Pass, and the other from Qandahar via Multan. From Lahore the route ran across north-eastern Punjab and northern Haryana, before turning south at Ambala to march almost parallel to the Yamuna, before reaching Delhi.[2] The shift might well have been caused essentially by the relative prosperity of Multan and Lahore. In the fourteenth century, Lahore was a ruined city, having been almost totally destroyed by the Mongol raid of 1241. Multan was then the city next in importance to Delhi. By the seventeenth century, Lahore was again a very large city, one of the three recognized capital towns of the Mughal empire; and much of the trade with the Middle East overland came to be conducted from it. This development took place alongside a relative decline of Multan, and a decline too, perhaps, of the towns that stood formerly on the direct Multan–Delhi route.

Political factors, too, seem to have played some part in determining the alignments of some of the routes. For example, the new route to the Deccan through Handia on the Narbada, replacing the older route through Ujjain,[3] was quite obviously made possible owing to the pacification of the upper Narbada valley by the Mughals.

Medieval sea-ports seem to have enjoyed a life-span partly determined by the speed with which silting occurred in the harbours serving them, and partly by other factors. In the Indus delta, there was a firmly sited inner port – Thatta – near the head of the delta. Then on a major channel, there was an outer port, Lahori Bandar, which was able to

[1] Ibn Baṭṭūṭa travelled from Ghazni to Multan, via Kabul, and then, after returning from a journey to Sehwan, took the route to Delhi, passing through Abohar, Ajodhan (Pakpattan), Sarsuti (Sirsa), and Hansi (Ibn Baṭṭūṭa [68], 392–414; trans. Husain, 1–24). Rashīdu'ddīn, making his way back from Delhi first went to Multan, and was then planning to travel via Kabul to Tabriz in Iran (Faẓlallāh [2], 168).

[2] See: Habib [339b], sheet 4b. The sources for the routes are given in the notes to the sheet.

[3] Habib [339b], sheet 9b, and notes to that sheet.

receive vessels of up to 200 tons; its site might well have changed with shifts in the main channel. Finally, there were anchorages at the mouths of the Indus channels, and the cargoes of the heavier ships were unloaded there on boats.[1] In the Gangetic delta, the Hugli river flowed in a firmly established channel, and thus, when Satgaon silted up, its position could yet be enjoyed by Hugli nearby.[2] The ports in the eastern portion of the Gangetic delta were however, far less firm, owing to constant changes in the channels.

In Gujarat, contrary to a widely-held belief, Cambay (Khambayat) could of itself never have received large seagoing ships. It major outer port was Ghogha on the Saurashtra coast. At the latter port, ships of pretty large tonnage could drop anchor; and the cargo was transshipped to Cambay in small boats.[3] In the seventeenth century, Surat attained prosperity largely at the cost of Cambay. The new port owed its importance to a number of factors, such as the route to Agra via Burhanpur, which the Mughal empire made possible, the facility to enable large ships to anchor in a dredged channel of the Tapti at Surat and, finally, the discovery of a deep natural hole (Swally Hole) near the mouth of the river.[4] The decline of the Mughal empire, and with it of the Burhanpur route, seems to have been as disastrous for Surat as a port as the shift of the English to Bombay.

The evidence that we have been able to use in this section is probably suggestive in many respects but seldom conclusive. In any comprehensive treatment, it would be necessary to consider the various regions in detail; but primary research which could make such consideration possible, is lacking. Study of place-name evidence and fieldwork in medieval archaeology are still in their infancy, and offer, at the moment, little help in elucidating problems of historical geography. It is, however, an area where many new discoveries and perceptions are to be expected which will doubtless considerably enlarge our present understanding.

[1] See: Nisyānī [153], f. 50a–b; Purchas [90] (Withington), IV, 171; Pelsaert [92] (trans. Moreland and Geyl, 31–2; Foster [31], (1634–36), 191–2; Thevenot [103], (ed. Sen), 75; Hamilton in *Pinkerton's Voyages*, VIII, London, 1811, p. 304. Cf. Abbott [205], 45–54.

[2] Hugli could receive ships of up to 600 tons (Foster [31] (1661–64), 66. For heavier ships the anchorage lay in the channel between Kakdwip and Sagar Islands at the mouth of the river (Hamilton, *Pinkerton's Voyages*, VIII, p. 408).

[3] Abū'l Faẓl [123] I, 486; Purchas [90] (Payton), IV, 296; Hamilton, *Pinkerton's Voyages*, VIII, p. 314; *Mir'āt-i Aḥmadī* [167] (supplement), 194–239.

[4] Abū'l Faẓl [123] I, 487; Purchas [90] (Middleton), III, 185; Pelsaert [92] (trans. Moreland and Geyl), 38–9; Godinho, trans. *JBBRAS*, NS. XXVII, pp. 124, 127.

CHAPTER II

SOUTH INDIA:
Some general considerations of the region and its early history

The term 'south India' denotes that portion of peninsular India beneath the Krishna river and the watershed of its major tributary, the Tungabhadra. There is an arbitrariness in this delineated territory which is as egregious as any geographical convention adopted for expository purposes. Looked at in a contemporary light, this division of peninsular India partitions two of the modern states of India, leaving their northern portions out of the present discussion. Were modern states of India merely constitutive units of administrative convenience, this mutilation would require little comment. However, the modern states of Andhra and Karnāṭaka are taken as significant cultural regions, a consideration which justified the demands for separate statehood two decades ago when they were created in independent India. Valid as the arguments of those who demanded and suffered for the creation of these states may have been in the 1950s, these modern states are not valid spatial units for the study of many historical questions of the middle period of south Indian history. Northern Karnāṭaka – called by the British 'the Bombay-Karnatak' – and Telengana may be excluded from the purview of this discussion on the basis of the former area's historical association with the northern portions of the Deccan peninsula and the latter area's very late development as a region of any sort. Malabar might have been excluded from the macro-régime of south India on equally valid grounds, but most particularly because after the tenth century this region, along with the rest of Chera country (Kerala) was a region of extreme isolation from other parts of the southern peninsula. However, Malabar is included in the present discussion for other good reasons, most pre-eminently for its role in the trade system of southern India and for the variations in social and political organization it contributes to this discussion.

The procedure of defining a south Indian region on the basis of the interaction among its parts is only one approach to regional analysis, that of considering the unit of study a 'uniform' region. Another procedure for defining this macro-region is to treat it as a 'nodal' region. Accordingly, and considering the sub-continent as a whole, one can

focus upon the nodal attraction of the two great basins of the Ganges and Kaveri. This is to propose an alternative to the usual significance attributed to the Vindhya-Deccan plateau peninsular barrier and to suggest a different conception of north–south, sub-continental discontinuity. W. M. Day does as much in seeing in the sub-continent two perennial civilizational cores: the Gangetic plain with its extension into the Chambal basin, or 'Hindu-Aryan India', and the Coromandel plain with its extensions to the tablelands of the interior peninsula, or 'Hindu-Dravidian India'.[1] Each of the cores maintained great populations and each attracted the interests of quite distant people. What separated these primary civilizational cores was not simply the upthrusting plateau, the backbone of the peninsula, but a broad zone between the Krishna river in the south and the Kaimur range in the north. The peoples, cultures, and states of this intermediate zone between the civilizational cores have an ancient historical career which is consistently influenced by the developments of the Gangetic and Coromandel cores and is little affected by the peninsular barrier. It is not proposed that this conception of what is, in effect, a trizonal (north-central-south) rather than the conventional bizonal (north-south) division of the sub-continent overcomes the basic difficulties of using gross divisions of this sort. However, for the problem at hand, this kind of distinction may serve to focus attention more clearly upon the perennially influential character of the Coromandel plain for a major part of the sub-continent. Moreover, it is important ultimately to recognize that for many historical purposes it may be most useful to concentrate upon nodal regions, i.e. upon cores, rather than upon uniform regions, i.e. upon boundaries.

Delineating what is called 'the macro-region' for this study – that portion of the peninsula which lies south of an imaginery line from about 13° N, on the Malabar Coast of the Arabian Sea, to about latitude 18° N on the Coromandel Coast of the Bay of Bengal, still leaves a complex, composite region. It includes most of what has been called the 'Dravidian culture sphere'. Following the linguistic usage first suggested by Francis W. Ellis in 1816 to describe a family of languages in the southern peninsula,[2] O. H. K. Spate employs the term 'Dravidian S[outh]' to refer to this part of the sub-continent and sees it as consisting of a group of 'perennial nuclear regions': Kalinga country or Orissa, Andhra or Telugu country, Chōḷa and Pandya parts of Tamil country, and the isolated south-western littoral of Kerala or Malabar.[3] A. H. Dani has also spoken of the portion of the peninsula south of the Krishna river as a significant palaeographic region.[4] In social terms the

[1] Day [282], 114.
[2] Burrow and Emeneau [244], v.
[3] Spate [517], 148.
[4] Dani [277], 193

southern peninsula has also been recognized as distinctive. Irawati Karve delineates a separate southern zone of kinship organization which includes Karnāṭaka, Andhra, Tamilnad, and Kerala; Marriott, in his discussion of caste ranking among Coromandel peoples has also suggested that parts of Karnāṭaka and Andhra share Coromandel characteristics.[1]

The major early source of civilizational elements within the macro-region here defined was the Tamil plain. This coastal lowland was partitioned among three large territories (*maṇḍalams*) comprising hundreds of localities (*nāḍus*). The northernmost of these was Toṇḍaimaṇḍalam; south of this was the territory called 'Nāduvil-nadu'; and, below this, in the Kaveri basin, Chōḷamaṇḍalam. Pāṇḍimaṇḍalam included the southernmost portion of the peninsula. From the fifth century, a civilization developed in the Tamil plain whose social and cultural forms profoundly influenced people over a great portion of the southern peninsula. This influence was carried by people of the plain as the peasant agrarian system there expanded during the Chōḷa period. In fact, the macro-region is almost coterminous with the maximal extent of the Chōḷa overlordship, and the provenance of Tamil language inscriptions of this period helps to define the macro-region as much as other evidence. Thus, a substantial portion of the modern state of Mysore – its heartland consisting of the modern districts of Mysore, Bangalore, and Kolar – once comprised an area of Tamil influence called 'Kārmaṇḍalam', a name which persisted in Tamil usage during the time that the territorial name 'Gaṅgavādi' was used among Kannada-speakers. There were similar extensions of dominance by Tamil-speakers – peasants, Brahmans, and warriors – northward over the Andhra plain to the delta formed by the Krishna and Godavari rivers as well as southward to include the southernmost portion of the peninsula, Pāṇḍimaṇḍalam. Modern Nellore was within the overlordship of Rājarāja I, and, under the last of the great Chōḷa overlords, Kulōttunga I, the Krishna-Godavari delta (Vengi) was firmly integrated within the Tamil plain-based overlordship of the Chōḷas. The scope of this authority – which will be discussed as 'ritual sovereignty' below – concluded a century of efforts by the Chōḷa overlords to incorporate within their overlordship this potentially rich deltaic tract in which Tamil-speaking peasants represented an important segment of the population. Along with this expansion of peasant peoples and the Chōḷa overlordship into territories contiguous to the coastal lowland, including portions of modern Karnāṭaka and Andhra as well as the uplands of modern Coimbatore and Salem (Koṅgumaṇḍalam), went many elements of culture and society. Such elements were transformed,

[1] Marriott [406], 53.

of course, and over time they so changed as to constitute distinctive sub-cultural variations within the macro-region.

Even after these diverse cultural systems had emerged as mature in the thirteenth century, there were continued influences from the Tamil civilization core in religion, for example, while a reverse flow of political power and authority emanated from the northern territories under first the Hoysaḷas, then the Vijayanagara overlords. Such interactions between the Tamil civilizational core in the coastal plain with those territories which had been extensions of the plain produced a supra-cultural zone which directly influenced society everywhere in south India.

The physical elements of the macro-region are complex. The southern portion of the peninsula shares with the northern, Deccan, portion a peninsular configuration which emphasizes the sea and contact beyond the sub-continent by means of it. The influence of the sea is very ancient and has led some scholars to speculate that the basic ethnic composition of the peninsula may have been influenced just as much by overseas immigration as were the continental portions of the sub-continent by ancient overland migrations.[1] Further, the impressive maritime activities of the Pallavas and the Chōḷas were but continuations of the Sātavāhana engagement in overseas trade. The old and stable Deccan plateau formation has affected the pattern of settlement over much of the peninsula. Its geomorphological character produced the pattern of fertile lands capable of supporting relatively dense populations existing as scattered and isolated nodes of prosperity and civilization surrounded by forest-clad uplands capable of supporting only small, and often predatory, populations. Spate's four 'perennial nuclear regions' of the 'Dravidian S[outh]' alert one to this basic configuration, but each of these four – Kalinga, Andhra, Chōḷa and Pāṇḍya country – can in turn be subdivided into nuclear sub-regions of sedentary, advanced peoples amidst forest and hill peoples. The consequences of the pattern of isolated settlement and the significance of the sea have critical historical importance for the macro-region under discussion.

The full meaning of the sea boundary of the southern peninsula is yet unclear. Maritime trade dating from the early years of the Christian era is dramatically, if incompletely, documented in the accounts of classical Europe, and from more recent archaeological findings from south India as well as peninsular and insular south-east Asia. The cultural impact of the Pallavas is monumentally preserved in the Cambodian kingdom of Angkor, and the military impact of Chōḷas in

[1] Noted by Sastri [481], 66–7; Karve [376], 328–35; Subramanian [526]. Associated with this is the idea of 'Lemurian' or 'Gōṇḍavāna' land forms which supposedly connected south India, Ceylon, Australia, New Zealand, Malaysia, and east Africa; see: Pillay [448], 5–7.

Ceylon and the Malayan peninsula is documented in some lengthy and important inscriptions. Whatever is made of the fragmentary facts of this early maritime interest and activity – and there is yet much for scholars to do – some of the more conspicuous manifestations of it may be suggested.

From an early time until perhaps the fourteenth century, the sea offered the south Indians opportunities for both trade and piracy. Chinese records identify Kāñci (Conjeevaram, Chingleput district) as an important trade centre as early as the second century BC. Other important entrepôts on the Coromandel Coast included: Kāvēripaṭṇam (Roman sources: Camara), Shiyali Taluk, Thañjavur; Pondicherry (Poduca); Maṛkānam (Sopatma), Tindivanam Taluk, South Arcot; and Masulipatam (Masalia). From these ports, associations of south Indian merchants sailed to the entrepôts of the Kra Isthmus or directly to other south-east Asian ports with wares collected from throughout the southern peninsula. And, to these Coromandel ports, came merchants from south-east Asia. Their commercial and cultural activities, if the recent and persuasive research on early south-east Asian history is to be accepted, were largely responsible for the many elements borrowed from south India. While controversy remains on the major directionality of influence and agents in the early trade and cultural relations between south India and south-east Asia, the existence of trade centres on the coast as well as in the interior certainly constituted points of a vast commercial network reaching ultimately to China.

Of even greater antiquity was the sea-trade to and from the Malabar Coast. Harappan sites in Gujarat raise the possibility that this coast was part of a trade system connecting west and south Asia 4,000 years ago. Two thousand years ago, the Malabar Coast was the primary calling-place for Greco-Roman traders whose goods were carried over trans-peninsular routes to the Coromandel Coast until the late first century. Roman coin hoards mark this trans-peninsular route, and the poetry of the ancient Tamils describes bustling emporia on the Coromandel Coast. Sought in this trade of antiquity were a range of goods which remained constant over time; some of these goods were of a transit sort to be traded beyond India, and others were of a terminal sort to be carried back to the Mediterranean world. This trade system tying south Indians to a wider world persisted from the beginning of the Christian era until perhaps the thirteenth century when two developments brought it to an end. One was the deepening Muslim control over Indian Ocean trade which favoured the commercial ascendency of Muslim trade from western India, by this time under greater control by Muslims. Coromandel Muslims continued to participate in the Indian Ocean network,

but the role of Coromandel diminished relatively after this time while that of western India grew.

Coupled with the extension of control over trade lanes beyond India by Muslim traders on the peninsular coasts was a change in the structure of trade in south India. From about the ninth century, wealthy and prestigious associations of merchants, trading over extensive portions of the southern peninsula and beyond, were integrally connected with the dominant agrarian institutions. Itinerant tradesmen, or 'guilds', provided one of the means by which the scattered, advanced agrarian communities of the period were linked together. Changes in the political and economic organization of south India by the fourteenth century deprived itinerant trade associations of their former functions; itinerant trade associations ultimately merged with localized merchant groups in the internal trade. Many of the former itinerant travellers may have become part of the Muslim trade community on the coast, taking advantage of the Muslim-dominated trade system of the Indian Ocean. Until the fourteenth century, therefore, overseas trade must be seen as the corporate extension of the south Indian domestic economy; after the fourteenth century, an expanded, more urbanized internal south Indian economy diminished the dependence upon this older trade network and its seaward extensions. Nor was the sea to have the same importance again until the late period of European control in south India.

This last proposition may appear ironic in the light of the importance historians have attached to European sea-power as a factor in the loss of Indian independence. It is nevertheless arguable that for the first two centuries or more of the European presence, European sea-power and sea-trade remained marginal to south Indian developments, commercial or otherwise, in contrast to Bengal. From the early sixteenth century, when the Portuguese assumed control over the Indian Ocean trade network from their headquarters in Goa, through the seventeenth century ascendency of the Dutch on the Coromandel Coast and in Indonesia, and through the Anglo-French rivalry of the mid-eighteenth century, European trade was centered upon, and its impact restricted to, the coastal borders of the peninsula. At their most involved, Europeans, especially the British who were the most successful, tenuously held insignificant termini of the inland trade system of the southern peninsula. For most of the seventeenth and eighteenth centuries European traders were content with a small volume of trade from these stations along the coast and content also to remain at the fringe of an increasingly chaotic polity which threatened even their small-scale commercial operations. Once their trade stations had been

extended into small territories in the eighteenth century, and they were able to mount landed power, the sea became an important way of extending European authority for, as demonstrated in the seaborne expedition of Clive and Watson to Bengal in 1756, the sea provided the British with flexibility and mobility which could not be matched by any other power in India. It was as an adjunct to military strength based upon the land that the sea began, once again to have an impact upon events in south India by the eighteenth century.

The sea boundary of the south Indian macro-region had once before played a politico-military function similar to that under the British in the eighteenth century. This was during the Chōḷa period when south Indian soldiers established temporary holds in Ceylon and beyond. Rājarājachōḷa (985–1014) and his son, Rājēndrachōḷa (1012–44) undertook these daring military expeditions. Rājarāja, according to an inscription at Thañjavur late in his reign, claimed conquests in many parts of south India as well as Ceylon (Īlamaṇḍalam) and the Maldives; Rājēndra, according to the Thañjavur inscription of his nineteenth regnal year, boasts of some of the same conquests as his father and, perhaps most daring of all raids, to Kaḍāram (Kedah, modern Malaysia), the northern portion of the Śrīvijaya kingdom.

These latter Chōḷa raids were meant to yield rich booty and nothing more permanent. Such far-ranging predation was a part of the pattern of Indian overlordship and a central, though neglected, aspect of Indian kingship. Where there was neither the tradition of, nor the apparatus suited to, the realization of state revenue through an ordered administrative system, except in quite localized territories, Indian rulers, great and small, depended for a portion of their income on raids upon neighbours or, in some cases, upon distant, rich, overlords. Samudragupta of the fourth century provided the classic model for such expeditions. More modest models were the cattle raids of contemporary hill peoples upon plains villages. Raids beyond the sea frontier had a similarly patent predatory purpose. Detailed knowledge about distant, small, rich kingdoms, probably borne by contemporary venturesome Coromandel merchants, would have served to justify the palpable risks of these undertakings. The sea thus provided the opportunity and the means to extend the region from which wealth could be extracted beyond the peninsula itself, and the wealth won in such daring raids was utilized to widen the Chōḷa power-base in the central Coromandel region.

From the point of view of historically persistent forms of social and economic organization, the peninsular environment with its separated river basins and its imposing dry, upland interior was more important than the sea. The Coromandel (from 'Chōḷamaṇḍalam') plain was the

major core region of south India, extending from the tip of the peninsula to the northern edge of the broad delta of the Godavari and Krishna rivers. Never deeper than a hundred miles, in the Kaveri basin, the eastern peninsular lowland is moulded into a complex structure by the rocky extensions of a broken range of low hills that run parallel to the coast, called the 'Eastern Ghats', and by patches of lateritic soils and rocky marine deposits. The Coromandel plain is traversed by streams draining these broken hill-ranges as well as those of the more imposing highland blocks of the western side of the peninsula, the 'Western Ghats' (Sahyadri), including the Nilgiris in the north and the Anamalai, Palni, and Cardamom hills in the south. Peaks of the western highland attain an elevation of 8,000 feet. The most important streams are the Krishna, and Kaveri (anciently called Po<u>nn</u>i, and Karikālachōla-Pērāru) each of which form extensive, fertile deltas; other important rivers are the North Peṇṇār (Uttara Pinākini), Pālār (Pālāru), Pōṇṇaiyar (South Pennar or Dakshina Pinākini), Tāmbraparṇī (in Chōḷa times: Mudikondachōla Pērāru), and Vaigai. The unfolding of this plain to its full contemporary extent, in agrarian forms, was gradual; it was not completed until the late nineteenth century when Kaveri canal irrigation brought the south-eastern corner of Thañjavur into reliable irrigated cultivation.

The western boundary of the Coromandel plain is difficult to define, consisting as it does of a great variety of transitional physical situations. These vary from slight modifications of the plain to sharp topographical breaks caused by upthrusting hills. In general, however, the western boundary of the plain was marked by intrusions of the plateau formation. This ancient upland derives significance not only in marking the edge of the coastal plain, but also in containing great tracts of cultivable land. These tracts are discontinuous owing to the deep-cutting rivers and formidable rocky strata bared by these rivers during their often turbulent traverse to the plain. Also, the upland territories are characterized by a hazardous rainfall régime caused by the rain-shadow effect of the western highlands or 'Ghats'. Most parts of the interior upland are, however, within easy access of the plain at many points, and it is to the broad, fertile Coromandel plain that people of the upland have been oriented since the ninth century.

The 1,000-foot contour is a relevant indicator of agrarian potential north and west from Kanya Kumari (Cape Camorin), to the Palghat Gap. West of this line, between latitude 8° and 10° 30′ N, rise the western highlands consisting of the Anamalai, Palni, and Cardamom mountains. North of the Palghat opening and the Ponnani river, which drains this gap area to the west, loom the highest of the western block, the Nilgiris. The north-eastern face of the Nilgiris drops sharply to the

Mysore plateau at about 2,000 feet. North of the Nilgiris, the 1,000-foot contour ceases to be a useful indicator. It obscures the extent to which the southern plateau is continuous with the Coimbatore upland and thus with the Coromandel plain.

The agrarian heartland of the Mysore plateau has been the 'Maidan', or 'open country' south of the watershed which crosses Karnāṭaka between latitude 13°–14° N. The Karnāṭaka heartland has been connected with the Coimbatore and southern Salem uplands and through these with the Coromandel plain by way of the Kaveri in the south and the Pālār in the east. North of the watershed, an irregular line running west from Hassan to Kolar, the Mysore plateau has long been an area of marginal population and agriculture constituting a transitional zone to the dry Bombay Karnāṭaka and the Deccan lavas of Maharashtra. Northern Salem, or the Baramahal, has, in effect, acted as a pivotal tract connecting the eastern portion of the Karnāṭaka maidan with the Coimbatore plateau, on the south, and the coastal plain in the east.

The entire upland complex of Coimbatore, southern Salem, northern Salem, and southern Karnāṭaka not only share general topographic characteristics, in contradistinction to the plain, but climatic ones as well. Its rainfall is low and the pattern variable in quantity and timing. The range of precipitation is between about 27 and 35 inches in a pattern resembling neither the classic monsoon of the west coast nor the so-called 'retreating south-west monsoon' of the coastal plain in the east. Some parts of this upland are subject to highly unreliable levels of rainfall such as most of Coimbatore district, where unreliability exceeds 35 per cent.

The western coastal plain (Kerala) constituted a special environmental context. Along most of its considerable length, except in a few southern portions of the narrow plain (e.g. Nāñcināḍ and Shencottah) where channel and tank irrigation and settlement is strikingly like that of Tamil country, moisture for cultivation in Kerala has been ample and almost exclusively monsoonal. Two crops have long been taken from the cultivated tracts behind the coastal backwaters: a long crop planted at the time of the onset of the south-west monsoon in May and harvested in September, and a shorter crop planted in November when a second period of rainfall occurred, and harvested in January. The basic unit of settlement and production was the Nayar compound, or *tara*. Each of these was also a political unit under the control of a matrilineal Nayar *tarawad* whose male warriors dominated the scattered hamlets of lower-status labourers. Brahmans of this area imitated this mode of settlement and production in their walled *illam*. Here, in contrast to the Tamil plain (again, except in those places of ancient Tamil influence in the southern *Vēnāḍu* tract), there was neither village nor locality

organization mandated in Tamil country by the production organization around locality irrigation control.[1]

The broad structural and climatological terms in which the macro-region, south India, has been discussed to this point are neither precise nor invariant. Topographical and climatological elements certainly shaped the potentialities for interactions among peoples of the southern peninsula, but in no sense did they prevent interactions from occurring. And, the configuration of structural and climatological elements at times made for one kind of region, at times for another. Thus, the littoral border of the primary Coromandel lowland must at certain times be considered a shatter or route zone connecting south India with south-east Asia and Ceylon, as during the Chōḷa period, while at other times, it was an isolated, buffer region to external influences as during much of the early modern period. Similarly, the northern boundary of the eastern coastal core does not end abruptly at the rough hills which mark the northern edge of Godavari trough. Skirting the coast at this point is an important routeway which the British called the 'Northern Circars' including, in addition to the deltaic districts, the modern districts of Vishakapatnam, Srikakulam, Ganjam, and Puri. This attenuated extension of the Coromandel lowland, properly the Andhra plain, constituted a channel through which trade and people moved from the eastern portion of the Gangetic plain, to the second civilizational core of the south-eastern peninsula. There is also some evidence of a reverse flow of religious influence and interaction from the Tamil plain to Orissa as in the stone inscription dated 1396 from Bhubanesvar recording a gift of land to the Siddhesvaramaṭha to support ascetics from Chōḷa, Pāṇdya, and Kāñci country. Moreover, there were times, brief to be sure, when this northern portion of the eastern coast figured prominently in the affairs of the peninsula south of the Krishna river. In the main however, it was not an integral part of the plain.

SOUTH INDIA FROM 1200 TO 1350

Social organization

Five factors operated together as persistent determinants of social organization in the macro-region: (1) the ecotypic consequences of natural and climatological variation discussed above; (2) the dual division of many lower-status, local ethnic groups into 'right' and 'left' groupings (e.g. Tamil: '*valaṅgai-idaṅgai*'; Kannada: '*balagai-eḍagai*'); (3) the extreme territorial segmentation of society and culture; (4) the

[1] For an excellent discussion of these differences, see: Mencher [413], 135–71.

density and secular importance of Brahmans; and (5) the relationship of local chiefs to kingly overlords. It was the interaction of these determinants which produced certain well-recognized variations within the south Indian macro-region, and, together, these factors resulted in a socio-cultural order strikingly different from that of the Gangetic core region. Among the factors which have influenced the structure and function of the material basis of south Indian society was the particular array of extant 'ecotypes', or the systems of energy transfers which underlie any cultivation.[1] Sets of organic elements, such as field crops, livestock, animal and human labour, combined with inorganic elements, such as implements, fences, irrigation channels, and, under given conditions of nature such as rainfall, soils and temperature, produce what is considered a satisfactory level of energy storage and transfers for the maintenance of life. In any particular environment, the range of possible or practicable ecotypes is a limited one, and only a few may persist for a considerable time. As an ecotype, or combination of ecotypes, is not a natural, but a cultural system for optimizing the energy transfers necessary for life, it will vary as much as a consequence of social and cultural values as from the states of nature in which it exists. If an agrarian system can be defined as the sum total of relations of people to arable land, then the ecotype, or combination of ecotypes, is its nuclear structure, for it is the arena where the relations of people with land is most direct.

Three basic ecotypic categories, each with variant forms, were to be found in thirteenth-century south India: those in which there was some form of irrigation (*nan̲cey*, *nīrārambam*, Tamil; *nīruvati*, Kannada; *pallapunāḍu*, Telugu) and those based upon rainfall alone (*pun̲cey*, *kāḍārambam*, Tamil; *mēṭṭaguḍḍalu*, Telugu). The third ecotype was a mixed one utilizing some reliable irrigation, usually from wells, and a major reliance upon rainfall. Then, as now, the scarce element in cultivation systems in south India was water, or effective moisture. Given a reliable and adequate supply of water, a diverse range of soils, appropriate drainage (or conditions in which drainage could be improved with reasonable effort) the cultivation of irrigated cereals, especially rice, was capable of supporting large populations. This has been most clear in the Kaveri basin, Chōḷamaṇḍalam, from the sea to the southern port of modern Salem where the control of Kaveri water dates from perhaps as early as the third century.

Irrigated rice culture permitted a high degree of routinization of cultivation practices: imputs become relatively invariant, timing of operations fixed, and risk and uncertainty of a reasonable return

[1] Special attention may be given the following work: Wolf [548], 18–30.

relatively low. The major tasks for the dominant people in such conditions have been to maintain control over land and labour and to maintain and extend the hydro-agricultural type of irrigation system. Where these conditions existed in south India, one found the early prominence of a powerful peasant society, of Hindu institutions and Brahmans as major recipients of agricultural surplus and of powerful regional overlordships as that of the Chōḷas. The relatively high density of Brahman villages (*brahmadeyas*) in Chōḷamaṇḍalam and in parts of Toṇḍaimaṇḍalam, where variations of rice cultivation under river- and monsoon-fed tanks was also possible, required these optimum ecotypic conditions. Toṇḍaimaṇḍalam, with its tank-based ecotypic régime, represents a mix of the secure, low-risk cultivation of the Kaveri region (which it resembles in places) and the more common mixed, to semi-dry, ecotypes. As in the Kaveri basin, the distribution of Brahman villages serves as a marker of reliable irrigated cultivation and its attendant social and cultural configurations, including relationships between the dominant high-status social groups and those of lower status dependent upon them.

Yet a third variant of reliable wet-rice cultivation has existed for perhaps two millenia, i.e. the rain-fed cultivation of Malabar and the west coast. Here, reliable, heavy monsoonal rains have provided sufficient moisture for rice cultivation and an ecotypic régime developed appropriate to it. The significant contrast of course is that whereas in other irrigated areas of the macro-region a high degree of local and supra-local cooperation was required to maintain the tank and riverine hydro-agricultural works, this was unnecessary on the west coast. Units of agrarian management were thus smaller, though the social concomitants were, if anything, more extreme.

Two other classes of ecotypes have been significant in south India. One is the obverse of the various kinds of cultivation based upon reliable irrigation. In many parts of south India, cultivation was based entirely upon rainfall, on soils lacking alluvial enrichment, and under other conditions inimical to prosperous agriculture. In these arid ecotypes, the hazards of agriculture and peasant society were the most extreme and the options for the peasant cultivators most limited. Only the most hardy millets could be sown with the expectation of a return, and there was considerable reliance upon pastoral activities. It is significant, and ironic, that in these arid ecotypic contexts, there was possibly a degree of routinization as great as those of the contrastive irrigational types. Social relations were influenced by the fact of very low population densities; there was no reliable surplus for the support of brahmanical institutions of learning or religion. The arid zone ecotypic situations would seem to cover the Maṟavar and Kāḷḷar people

of Ramnad, Madurai, and Pudukkottai, at times, and the Reḍḍis of parts of Rayalaseema.

The third class of ecotypes – in addition to the irrigated and arid types – consisted of semi-dry types. Well irrigation provided some dependable moisture, but for the most part cultivators depended upon rainfall. These were the most common historically as they remain today. In terms of agricultural strategies, the semi-dry or mixed ecotypes provided the greatest scope and created the greatest need for decision effecting cultivation. Here the difference between a minimal and maximal return on the investment of organic and inorganic inputs depended critically upon the judgements of numerous, small land-controllers. Their agrarian economy was based upon a balance of livestock and millet production. In historical terms this has meant that in certain parts of Tamil country, notably Koṅgumaṇḍalam (modern Salem and Coimbatore) but also in portions of Toṇḍaimaṇḍalam and Pāṇḍimaṇḍalam, as well as much of Gaṅgavadi in Karnāṭaka, agricultural land has been controlled by the most able cultivating groups. The very superiority of the agricultural skills of semi-dry cultivators protected them against most of the hazards of arid-zone peoples and against the hazards of external control and exploitation to which cultivators in the Kaveri and similarly favoured placed were subject by their dependence upon established irrigation works and upon low-status, agrestic labour. Cultivators of semi-dry ecotypes were highly mobile, able to move their flocks and herds as well as their skills and thus offset threats of domination.

Corresponding with these three general ecotypic régimes were socio-cultural configurations. Where reliable moisture provided the means for perfecting highly routinized forms of wet-cropping, populations were greatest, the divisions of labour most elaborate, the density of Brahmans and their relatively autonomous settlements highest, the values of hierarchy and pollution most prevalent, the position of agrestic labour and certain artisan and merchant groups most degraded, and the basis existed for a powerful ruling class and kingship capable of subjugating neighbouring peoples. In the arid zones, the situation was almost the reverse: scant and scattered populations, simple division of labour with little status and rank differentiation (a condition often glossed over as 'tribal'), few Brahmans, vedic temples, and centres of learning, and considerable vulnerability to exploitation by others. The semi-dry, or mixed, ecotypes generated social and cultural concomitants found in one or another form in the other two ecotypic régimes. Here, the material base was adequate for the maintenance of only a few nodes of population concentration, together with Brahmans, and chiefs who claimed kingly status (i.e. conditions like the hierarchical features of

wet-zone society, but attentuated). Status hierarchies existed, but were shallower, and the division of labour less elaborate (i.e. conditions like the 'tribal' features of dry-zone society, but less extreme). The peasantry was more mobile and independent because cultivation was based upon the most skilful application of scarce moisture, and there were proportionately fewer agrestic labourers; merchants and artisans enjoyed relatively higher status and were closely linked to dominant agricultural groups. The secular trend in south India between the thirteenth and sixteenth centuries was for a few, localized mixed ecotypic tracts to become more reliably supplied with water through developmental activities, and to achieve more hierarchical features. It also allowed for the development of a number of formerly arid tracts to become places of mixed, or semi-dry, agriculture with the socio-cultural concomitants of this ecotype. However, the three general ecotypic régimes and their associated socio-cultural configurations persisted until well into the nineteenth century in most places.

The second persistent determinant of social organization in the south Indian macro-region was the dual division of lower social groups. The terms for this fundamental division of lower castes are not consistent over the macro-region, being referred to as right and left division among Tamil- and Kannada-speakers and as sectarian divisions among Telugus. Among Telugus, Vaishnavas corresponded to the right-hand division, and Saivites corresponded to the left-hand castes elsewhere. Nor is the composition of the 'alliance' so easily specified because of the variations in time and place. However, in most cases, the right-hand castes (Vaishnavas among lower Telugu castes) are associated primarily with agricultural production and local trade in agricultural commodities, while left-hand castes are associated with mobile artisan production and relatively extensive trade in non-agricultural commodities. These divisions of lower castes appear to operate as territorial alliances from which are largely excluded the two other, and most powerful, social strata of south Indian society, Brahmans and *sat* (or 'pure') Sudras.

For at least the last 500 years it has been possible to identify a tripartite division of all south Indian castes in most parts of the macro-region. These are Brahmans, respectable ('*sat*-') agricultural castes of Sudra ritual rank, and lower castes, the last being divided into the bifurcated groupings.

To some degree, this tripartite division may be regarded as a nascent class-structure, especially on the countryside, because of the congruence of this essentially ritual ranking and the socio-economic statuses occupied by each grouping. Dominant landed folk everywhere in the macro-region consisted of Brahmans and *sat*-Sudras. In the zones of most advanced agriculture in the Tamil country and Karnāṭaka, such

persons were designated as '*kāṇiyāṭchiyār*' ('*mīrāsīdars*' of the British (period) and enjoyed the right to a major share of agricultural income (Tamil: '*mēlvāram*') after the costs of production were met; they also enjoyed special rights over the disposition of cultivable but uncultivated lands in a circle of villages. While some agrarian management was vested in this group, it was on the whole a class whose rewards derived from membership in the politically dominant peasant groups of a locality or from grants by these dominant groups in the case of Brahman *kāṇiyāṭchiyārs*. Both Brahman and non-Brahman *kāṇiyāṭchiyārs* may often have been neutrals ('*madhyastars*') with respect to the dual division of castes. Beneath this dominant group were persons designated as '*kuḍimakkaḷ*' in Tamil country. They were almost invariably aligned with the right-caste division and always consisted of non-Brahman cultivators, some of whom being regarded as *sat*-Sudras (e.g. Vēḷḷāḷas, Vokkaligas, Kammas) and others of less esteemed rank. To these cultivators went a minor share of agricultural income ('*kuḍivāram*') as the resident cultivating group of a locality. Finally, there were agrestic labourers variously called: *kaivinaikkuḍi*, *ulavukuḍi*, *besa-makkaḷu*, *paraiyar*. Their share of agrarian income was most low as was their status within rural society.

Prior to the fifteenth century, and possibly as early as the eleventh century, the dual division of lower castes (i.e. non-*kāṇiyātchiyār* castes) was an important factor in south Indian society, but the deeply competitive nature and conflict of relations between the two divisions appears to have been largely absent. Why and under what conditions the relatively peaceful relations of the earliest period changed to the violent and competitive relations later is touched upon below (p. 40). But, whether peaceful or violent, the dual division of lower castes, is a distinctive marker of the caste organization of the macro-region.

Territorial segmentation of society and culture in the south Indian macro-region is another determinant of social organization which contributes to its definition as a region. Territorial segmentation relates to the marked extent to which social groups have tended to maintain a low order of significant and persistent relationships with groups at any substantial distance from their locality, as compared to the often extensive network of group relations maintained in other parts of the sub-continent. Locality loyalties and parochial relationships of all kinds are attributes of peasant society and culture to which the Indian culture sphere is not excepted. However, marriage and descent systems in south India operate in quite narrow territories. The preference for cross-cousin marriage and maternal-uncle and niece marriage within narrow marriage 'kindreds' is an ancient one. Also related to the territorial segmental feature is the precocious development of locality institutions by the

Pallava period which provided the framework through which the numerous nucleated territories of the Coromandel lowland functioned.

Territorially differentiated units of culture and society are deeply embedded in the earliest Dravidian culture of the Classical period. According to Classical works of this early period of Tamil literature, possibly the third century, the basic unit of ethnic identification was the '*nāḍu*', and these were divided into five types on the basis of natural sub-region and related occupational patterns. These ethnic territorial segments are:

1 *Maruta makkaḷ* or ploughmen (*ulavar*) inhabiting fertile, well-watered tracts (*panai*) and living in villages called *ūr*;

2 *Kuravan makkaḷ* or hill people who are foresters, make charms, and tell fortunes and may leave the forest to work in the *panai*;

3 *Mullai makkaḷ* or pastoralists, also called *ayār* (cowmen), *kōvalar* (shepherds), and *itaiyar* (cowherd or shepherd);

4 *Neytal makkaḷ* or fishing people living in large coastal villages called *paṭṭinam* or small ones called *pākkam*; and

5 *Pālai makkaḷ* or people of the dry plains called *eyinar*, *maravar*, and *vētar* who are hunters of both the dry plains and the forest.[1]

This five-fold division of ancient-Tamil speakers is interesting not only as a description of ancient, territorial segmentation of Tamil sub-cultures, but as suggesting a ranking postulate in the Tamil culture sphere comparable to the *varna* concept elsewhere in the Indian culture sphere. It is clear from classical literature that the people of the first category, those of the *panai* who lived by the plough, enjoyed a special place in the affection of the greatest classical poets who were, for the most part, men of the 'thriving soil' of the *panai*.

Of the four determinants of social organization in early south India thus far examined, it will be evident that two (ecotypic constraints and localized social and cultural segmentation) exercise an influence toward relatively restricted self-contained units of organization, while the other two (the dual division of ethnic groups and the secular as well as ritual influences of Brahmans) press to larger, more inclusive organizational forms. Another way to express the outcome of the interactions of these determinants is in terms of 'hierarchical' or 'organic' forms of social organization, and those forms which can be termed 'tribal'. Where conditions of nature permitted extended tracts of reliable wet cultivation – as in the lower Kaveri basin or portions of the Pālār, Poṇṇaiyar, and Vaigai basins in the Tamil plain or in the delta of the Krishna, or on the west coast – in these places were found hierarchical social systems with often steep status gradients between the Brahmans

[1] These terms have been examined by numerous scholars; see: Kanakasabhai [375]; Iyengar [375]; Subramaniam [525], [524].

at the top and the untouchable labourers at the bottom. Here, most of the agricultural population beneath the few dominant groups (e.g. Toṇḍaimaṇḍalam Veḷḷāḷas, Nayars, Vokkaligas, and Reḍḍis) and most of those involved in commerce and artisan production, were grouped together among the lowest strata of the non-Brahman social category.

The term 'slavery' has been widely and questionably applied to the field-labour force upon which irrigated ecotypes were based. In part, this terminology stems from British usage of the early nineteenth century. While distinguishing between a very restricted traffic of children for domestic service, particularly on the west coast, and a variety of tied-labour situations in places like Thañjavur and Malabar, the British promulgated a largely irrelevant 'slavery' prohibition in the middle of the century. The use of the term 'slave' also results from words like '*aḍimai*' in inscriptions, to denote persons and families who attach themselves to temples (also called '*devaraḍiyar*'); hardly a situation to establish the meaning of a term like 'slavery'. That agricultural labour in those irrigated portions of the macro-region was unfree is without question, and that the status of such groups was a degraded one, as evidenced by references to sequestered residence sites, is also without question. However, 'slavery' as an institution of personal bondage supported by administrative and legal constraints on movement and by the coercive extraction of work, is insupportable. The system of patron-clientage in irrigated tracts was such as to promote sharp status gradients between Brahman and *sat*-Sudra land controllers and field-labourers and artisan-traders (many of whom also inhabited sequestered residence sites), given the commitment in the places to hierarchical social values. But the position of the latter groups is clearly better understood in terms of the prevailing patronage relationships which varied according to place and function than in terms of categorical distinctions as implied in the concept of 'slavery'.

Agrestic labour in south India appears to have been tied neither to particular persons in personal bondage, nor to particular portions of land. Rather, it would appear that in the irrigated zones of cultivation, where the condition of 'slavery' occurred, groups and landless families became clients of the dominant locality land controllers. They must have received for their labour a share of the crop at harvest (4 per cent is one reported share from Tiruvendipuram South Arcot in 1775; 20 per cent is reported from Tiruppattur, Salem in the 1790s) plus smaller payments in the course of the year in return for which they provided the general labour in a circle of villages. That labour would consist of regular cultivation in the fixed routines of wet cultivation; regular labour, on a locality basis, in the maintenance of irrigation works and roads, and such irregular labour as reclamation as well as emergency

repairs due to flooding and other damage to fields. When, as occasionally occurred, lands were granted to temples expressly without the benefit of cultivating labour ('*kuḍiniṅgiya-dēvadāna*'), this may have meant that the temple donee as part of the locality society had access to the local argrestic labour force, or it may have meant that there was a shortage of such labour and it was the responsibility of the donee to acquire additional workers.

Certain features of the bonded character of field labour appears general. There was a differentiation between agrestic labourers who worked in the fields of Brahmans (Pallars) and those who worked for non-Brahmans (Pariyans); there was thus no general social category of 'masters', nor 'slaves'. Also, agrestic labourers were tied to particular lands, villages, and localities, hence the term 'serf' has also been used. In general, therefore, the sanctions which maintained these bonds between labourers and land controllers were not based upon conceptions of personal proprietorship enforced by a legal and police system, but more an accommodation by persons not part of the ethnically defined (or, in the case of Brahmans, culturally defined) groups of locally dominant folk to suffer degraded status in return for the increased survival possibilities of living in relatively prosperous agricultural tracts. Early nineteenth-century reports refer to landless labourers who were permanent tenants of a village ('oolcoodies') in contrast to tenants at will of the village ('oolpayacoodies') but neither possessed 'property'. The status aspects of clientage based upon differential productive contexts, not categorical conceptions of 'slavery', inform us about the condition of not only agrestic labour in early south India, but about the condition of others outside of the core locality groups of dominant agriculturalists.

In the semi-dry tracts, elements of hierarchy or organic social organization could be found, but the general form of social organization was that of widely dispersed clusters of villages in which the division of labour showed little rank relevance, except perhaps for the relatively few Brahmans at the top and the equally few landless labourers at the bottom. A good example of this may be found in Koṅgu country (modern Coimbatore) during the thirteenth century where the Koṅgu Vēḷḷāḷa category included most of the agricultural patrons and their dependent service clients and where the more mobile artisan traders and merchants of the left castes enjoyed higher status than those in places like Thañjavur. Finally, in dry tracts, where evidence of social organization is most fragmentary, the principal social units were, like the Maṟavars and Kāḷḷars of Ramanathapuram and Madurai, essentially 'tribal' in the sense that a local social system would consist of a single large social category with strong territorial differentiation, but scarcely

any hierarchy. These factors have an obvious relationship to the forms of political organization which existed during the thirteenth and fourteenth centuries.

Ruling classes and revenue

Political relationships in the south Indian macro-region were distinctive by the almost total absence of the *Kshatriya* institution. Shastric norms related to political authority and, in significant measure, to actual practices followed in many parts of northern India, were predicated upon the existence of a warrior estate with the following characteristics: high ritual status, marriage and descent rules resulting in broad territorial groupings of warrior lineages, and possession of a coercive capability beyond that of other individual ethnic social units (castes or tribes) and other corporate entities such as village communities, guilds, and religious bodies. Kshatriya institutions, variable though they were over northern India, produced warrior élites whose authority was maintained through networks of agnatic and affinal kinsmen, and whose primary function was that of ruling a small territory which at times could be expanded by warfare into a larger territory under able military leadership within the lineage, or could be reduced by succumbing to the expanding overlordship of some other warrior lineage. Rarely was this system of political organization capable of being moulded into a great kingdom, the sovereign claims of which covered even a portion of the Gangetic plain and then only briefly under the quite extraordinary military capability of a Samudragupta or Harsha. The usual political condition in northern India during ancient and medieval times was its relatively short-lived dynasties and its division into a great number of small territories under kin-linked warrior families of high ritual status. Such was the nature of *Kshatriya rāj*.

Within south India, it was only in Kerala that there emerged warrior lineages approximate to the *Kshatriya* model. Two features of Kerala organization appear important in this regard. One is that the monsoonal, wet ecotypes of Malabar made possible the levels of population and elaborate divisions such as those found on the Coromandel Coast, but without the requirement of supra-local cooperation to regulate and maintain riverine irrigational sources. This uniquely favourable natural setting, providing the basis for independent, self-contained, small chiefdoms, was the basis of the Nayar rule. The second feature is that these warriors never lost their identity as 'Sudras', at least as far as Brahmans were concerned. Nayar '*Kshatriya*-hood' was thus based on special ecological conditions within the south Indian macro-region, and it has been a case of enriched Sudra status. However modest this

accomplishment of investing sections of the dominant non-Brahman population with durable *Kshatriya*-like status may appear, it was rarely replicated in other parts of the southern peninsula except in very remote hill tracts.

Apart from these aberrant cases, the macro-region of southern India was without warriors of high ritual status, and it would be difficult to reconcile such a pattern of authority with two of the salient social structural characteristics of the macro-region. These were: Brahman secular authority and functions, and the narrow territorial segmentation of social relationships and loyalty. Perhaps because of these salient characteristics, it is only in the southern peninsula that kingly dynasties are found whose duration and occasionally whose scope of actual overlordship was impressive. Gangas, Pallavas, and Chōḷas are examples of this monarchical feature in historical times. In the more remote past, there is the persistent conception of three great kingships of the macro-region – Cheras, Chōḷas, and Pāṇdyas – mentioned in the Ashokan inscriptions and in the heroic poetry of the early Tamils. The legacy of these three kingships remained a lively one until the thirteenth century at least; the most powerful local personages took the title of '*mūveṇḍavēḷār*', meaning 'one who served the three kings'. This tradition of three great kingships in the macro-region was an important element in the political system of the thirteenth century.

The medieval south Indian political system was based upon states which were 'segmentary'.[1] In a sense this is true of political systems of most of the sub-continent at the time. However, whereas in northern India localized political units were rarely capable of being linked to kings whose sovereignty might for a time be recognized by local chiefly figures, such linkage was the normative condition in south India. South Indian kings were in all cases effectively in control of only a small portion of the macro-region, but the legitimacy of their hegemonic claims – which were ceremonial rather than real in any case – could be recognized by local rulers far removed from this core of real power. What was insisted upon by those who extended recognition to an overlord was a style of 'dharmic' kingship as that which was expressed in the Sanskrit tradition of the age. South Indian kings and dynasties of the medieval age, beyond the localities of their own power, were symbols of authority and legitimacy for a vast number of chiefly families throughout the macro-region. It did not matter that Chōḷa rulers, for example, were Tamilians for their sovereignty to be recognized among Kannada-speaking or Telugu-speaking chiefs. Nor was it important that the Hoysaḷa or Vijayanagara kings were not Tamils for their authority to be accepted by local chiefs in Tamil country, as attested by numerous

[1] This concept and its application to the Chōḷa state is developed in Stein [522a].

inscriptions. It mattered only that the idea of legitimate secular authority, as symbolized in the concept of kingship, should exist for the system of localized, segmentary political units to function properly.

The south Indian medieval state as a form of 'segmentary state' is best exemplified by the Chōḷa state of Rājarāja I and his son Rājendra, in reigns covering 985 to 1045. This and other states of the time were integrated primarily by the symbolic or ritual sovereignty which attached to the kingship, not by its effective power. In a polity where coercive means, or military capability, was not monopolized by the kingly centre but was possessed by every peripheral, local, unit in greater or lesser measure, there could be no centralized monarchy in terms of real power. The means by which the many localities and locally powerful men were linked to kings in Thañjavur was in their recognition of the ritual sovereignty acknowledged in the tens of thousands of stone and metal inscriptions which have been found in the macro-region. These inscriptions do more than tell us about ritual sovereignty; they are among the component elements of that sovereignty.

Inscriptions exist everywhere in the Indian culture sphere, of course. However, in no other parts of India, except perhaps in Bengal during the medieval period, do they appear to have constituted the expressive linkage mechanism of ritual sovereignty as they did in medieval south India. Moreover, whatever the difficulties of using inscriptional evidence,[1] part of their great value is that they can be located in time and space with considerable precision. Most inscriptions are documents recording gifts (*dāna-śāsana*) to Brahmans or temples from wealthy and powerful persons or groups in a locality. Yet, such documents often have an introduction, frequently in elegant Sanskrit, referring to the reigning king, his genealogy, conquests, and dharmic rule. This introduction adds nothing to the gift portion of the document which, in the case of most copper-plates, is usually in the local vernacular language. The introduction, or *praśasti*, is all-important, however, as a statement of homage or recognition of a great king by those locally prominent persons who instituted such gifts. Under Rājarāja I, Chōḷa *praśastis*, or *meykkīrrttis*, were standardized and kept current on an almost annual basis. Here, then, was a powerful symbolic element used in the political system, involving the skills of literate and erudite men. Inscriptions expressed the symbols by which particularistic loyalties, interests, and affiliations of powerful local persons were merged within a segmentary state, thus constituting an often extensive zone of legitimate overlordship.

A more widely recognized distinctive feature of medieval south Indian states was the primacy of various kinds of assemblies in the

[1] D. C. Sircar [513], 23–30.

governance of the numerous localized societies of which contemporary south India consisted.[1] The *sabhā*, or Brahman assembly, took responsibility for the decisions to allocate agrarian resources to various requirements of the hundreds of *brahmadēyas* or *agrahārams* of the macro-region, at least from the ninth to the fourteenth century. But even more striking from the point-of-view of managing resources, it was locality assemblies of non-Brahmans who carried out this function.

In Tamil country such localities and their assemblies were called '*nāḍus*'; more than 500 of these local territories are named in, and can be located from, the Chōḷa inscriptions to the thirteenth century. *Nāḍus* figure as the most important social territories in the earlier Tamil classical literature as indeed they continued to be under the Chōḷa segmentary state. In the Chōḷa period, generalized features of the dharmic order of the Chōḷa kings in their Kaveri domain of Chōḷamaṇḍalam were essentially superimposed over pre-existing ethnic and cultural units of great antiquity. These features included the support of Brahmans, brahmanical learning, and canonical (vedic) religion.

Those who controlled the resources in each *nāḍu* were called '*nāṭṭār*'. If 'ruling class' is taken to mean those with the power and authority to manage community resources, then the *nāṭṭār* was this class in Tamil country. Landed Brahmans could be included in this class if it is recognized that their secular authority was derived from grants by the *nāṭṭārs*. The legitimacy of the control of the *nāṭṭār* stemmed from their dominance over the land and people within a locality; this legitimacy, or rule competence, was fortified by the ritual sovereignty these *nāṭṭārs* extended to the great kingships of the macro-region: Chōḷa, Hoysaḷa, and Pāṇḍyan. The Chōḷa rulers, in addition to receiving this ritual homage, which marked them as great overlords, were the most powerful of all *nāṭṭārs* in the richest and most populous of all parts of the macro-region, the Kaveri basin.

In the segmentary states of south India until the fourteenth century, it is possible to speak of 'revenue systems' in terms of these localities; there is no evidence of local resources being legally and regularly transferred from local, nuclear areas of agrarian organization and production to the 'state'. One hears of land records, land taxes, and trade duties only at the level of the locality, or later, in the fourteenth and fifteenth centuries, at the level of clusters of localities, called '*periyanāḍus*' in Tamil country and *mahānāḍus* in Karnāṭaka. The treasure at times lavishly expended by Chōḷa kings on such things as temples were drawn from their own centre of power, the *nāḍus* of the lower Kaveri basin, or from pillaging wars carried on outside these royal domains. Thus, the great Bṛihadīśvara temple of Rājarāja I in Thañjavur,

[1] Noted by Altekar [213], among others.

for example, was constructed and maintained through demands by Rājarāja upon villages throughout the Kaveri delta core of Chōḷa power, as well as from booty taken from conquered Chera, Pāṇḍya, and Chālukya kings according to the 'Larger Leiden Plates' of Rājarāja.

Precisely because revenue was a localized matter, lists of revenue terms from this period are bewilderingly profuse and varied. Analyses of the relatively few terms which have a general currency make clear that most of these terms pertain to labour obligations and payments in kind within a locality. There existed no state apparatus for any other kind of revenue system.

One category of local revenue terms which looms large in the early records of south India relates to irrigation. At no time in south Indian history until the nineteenth century is there evidence that the creation and maintenance of irrigation works was other than a local responsibility. Again, considering the nature of the states of south India it could hardly be otherwise. In territories like those of Chōḷamaṇḍalam and Toṇḍaimaṇḍalam, in the central Tamil plain, most references to labour payments refer to the maintenance of irrigation channels, tanks, and riverine works. It is also striking from the map reconstructions of *nāḍus* of the Kaveri region that only very rarely did water-courses form boundaries between *nāḍus*, but water-courses are seen to flow through and define the central portions of these localities. Water management in those places favoured by reliable water resources were seemingly a vital part of the governance of a locality, and the greatest precision appears to have been employed in the accurate measurement of *naṉcey* (watered) land here. Where tank irrigation, based on rainfall catchment alone or in conjunction with stream-fed tanks, is found in the macro-region, a variety of terms occur relating to the rights and obligations of those who invested in the construction of tanks and who, along with others, were responsible for their maintenance.

Urbanization

In one crucial respect, the thirteenth century was as significant a transitional period in south India with respect to social and economic organization as the eleventh century had been with respect to political changes. That was in the development of urban places in the macro-region. At no time since the Classical period of the Tamil poetic anthologies, in the early centuries of the Christian era, did urban places possess the importance they had after the thirteenth century. However, unlike the urbanization of the Classical period, which appears to have been stimulated by overseas trade, that of the thirteenth century resulted from the consolidation of larger units of governance and economic

cooperation and temple construction. These two quite different sources of socio-economic change of about the thirteenth century must be examined separately.

The political accomplishment of the Chōḷa rulers Rājarāja I and his son Rājendra I of the eleventh century was to provide a paradigm or template for transforming the ancient locality culture and societies – the *nāḍus* – into segments of a new moral order based upon the merging of dharmic, Sanskrit elements and indigenous Tamil ones. This Chōḷa achievement became the model of south Indian kingship for others including the Hoysaḷas in Karnāṭaka and the Tamil Pāṇḍyans, both of which kingdoms contributed to the ultimate collapse of the Chōḷa state by the late thirteenth century.

Nāḍus in many parts of Tamil country and localities elsewhere in the macro-region did not long remain separate local units under the politically integrative influences of the segmentary state. During the twelfth century many *nāḍus* began to form clusters to deal with certain supra-local matters such as control of trade, support of large temples, and defensive alliances. In Karnāṭaka and in Tamil country, these coalesced localities were called '*mahānāḍus*' and '*periyanāḍus*' – literally 'great *nāḍus*'. In Tamil country, these may have first formed in the ecologically homogeneous lower Kaveri basin, possibly as military units serving the Chōḷa kings. Inscriptions of these enlarged localities mark them as instruments of dominant cultivating groups: their emblem was the plough (*mēḷi* in Tamil and Kannada; *mēḍi* in Telugu); their title was '*chitramēḷi periyanāṭṭār*' in Tamil or '*mēḷi sāsirvaru*' ('1,000 ploughs')[1] in Kannada; and they refer to themselves as 'prosperous sons of the soil...born of the four castes...sons of the earth goddess' ('Bhūmidēvi'). While it appears that the constituent localities of these supra-local bodies maintained their identity for social purposes (such as marriage territories), for religious purposes (such as the maintenance of sub-caste cult temples), and for the control over local agrarian resources, these supra-local bodies provided one of the bases for a new phase of urbanization through their consolidated control over supralocalities and their sponsorship and protection of temples dedicated to the worship of *bhakti* deities of this century and later.

A distinctive element in the temple construction of the thirteenth century is that this development came at the expense of what had been, in the previous several centuries, the major institution of high religion especially in Tamil country. This institution was the *brahmadēya*, a rural settlement of considerable size and wealth established by the *nāṭṭārs* and other local notables in imitation of the support to canonical, vedic religion of the Chōḷa dynasty and other kingly houses. *Brahmadēyas*

[1] Dikshit [288].

virtually ceased to be established during and after the thirteenth century, except in Pāṇḍya country under the resurgent Pāṇḍyan kingship. While many of those already established continued to enjoy autonomy and prestige, others became the nuclei of the new temple towns of the period. It is scarcely surprising that *brahmadēyas* should come to form the bases of new towns since they were, from their inception, large, multi-caste settlements with artisan and merchant populations as well as agriculturalists to serve the consumption needs of numerous Brahman families. One of the geatest of these is described in the 'Karandai Plates' of Rājēndra I. Formed from the lands of some fifty villages, this *brahmadēya* in modern Papanasam taluk, Thañjavur, was intended to support 1,083 Brahmans, most of whom were Apastambha scholars from Andhra.

This transformation of many of the hundreds of Brahman settlements had been presaged by significant prior changes in temple worship in these centers and elsewhere. Among such changes was the creation of *devi* shrines for the separate worship of goddesses in existing and new temples dedicated to vedic gods and the rise of popular *bhakti* ritual in Śrī Vaishnavism. Popularization of religious worship, the assimilation of folk (often female) tutelaries as consort deities, laid the basis for the emergence of large, new temple centres which either superceded the older, exclusive (often aniconic) religious activities of the *brahmadēyas*, or this development came to encompass the older forms.

Another significant element in the widespread temple-building of the thirteenth century and later was the enhanced importance of artisans and merchants involved in the construction of temples and the provisioning of the labour forces undertaking the work. The skills, goods, and services necessary for the creation of temples of this period did as much to create new towns as the completed temples themselves. An almost ubiquitous feature of urbanization of the time was the development of towns at the base of hills on which much of the new temple-building took place. These towns must have begun as supply depots for building materials and other supplies as well as the residential quarters of the workers. Considering all of this, it is not surprising to discover a new basis of cooperation between the dominant agricultural folk, under whose auspices these monuments were constructed, and artisans and merchants. This is reflected in the inscriptions of the thirteenth century just as clearly as the relationship between these same rural magnates and Brahmans was in the inscriptions of the eleventh and twelfth centuries. Moreover, one finds the same enhanced prestige of artisans and merchants expressed in the inscriptional records of artisan and mercantile corporations based in particular towns. This is reminiscent of some of the records of the great itinerant trade

associations of the ninth century and later, except that the new artisan and merchant groups were not itinerants with an independent, military supported existence, but now were integrated into an increasingly urbanized order.

Increased urbanization after the thirteenth century suggests increased trade, but this is not well supported by definite evidence from contemporary records. In fact, evidence of the eleventh and twelfth centuries suggests an economy already characterized by an elaborate division of labour and considerable commodity production. In regions of wet and semi-dry cultivation, some mercantile groups occupied important positions and corporate power within the large, multi-caste villages of these places as well as in trade settlements of their own (designated *paṭṭaṇa* or *puram*). The term '*nagarattār*', figures prominently in earlier Chōḷa inscriptions to designate commercial groups engaged in the trade of agricultural commodities, and another term '*saṅkarapādiyār*', referred to lesser merchants and artisan-traders organized in guild-like corporations of mixed castes (like *sreṇī*) who engaged in specialized commodity production and occupied separate quarters of larger villages.

The urbanization of the thirteenth and fourteenth centuries, to some extent, simply replaced older forms of trade by concentrating formerly dispersed commercial activities (e.g. fairs and trade settlements) in growing urban places. However, there is evidence that new areas of prosperous agriculture came into existence during the thirteenth and fourteenth centuries, especially in Koṅgu country, Karnāṭaka, and Pāṇḍimaṇḍalam. Moreover, temples and their pilgrim clienteles cannot but have stimulated increased trade. Apart from creating the context of pilgrimage-associated trade, temples were also principal consumers of goods obtainable only through supra-local trade networks. The requirements of increasingly elaborate and numerous ritual performances involved increased quantities of food for presentation to the god (and for post-presentation distribution as *praśādam*); other commodities consumed in ritual performances also increased. Temple personnel themselves constituted a large new consuming group to be served by merchants and artisans of the temple town and its environs.

Temple-generated urbanization was clearly a boon to merchant and artisan groups in yet another way. Town-centred trade freed many commercial and artisan groups engaged in commodity production from older social constraints imposed by the agrarian-centred concerns of the *nāḍu* localities. Periodic fairs ('*santhe*'), which served as centres of local commercial transactions and linked local with itinerant trade networks presumably still fell under the supervisory control of the *nāṭṭārs*. This was not quite the case as regards conditions in the new towns of the

thirteenth and fourteenth centuries. Towns were resorted to by many and diverse trade groups that, before the urbanization of the thirteenth and fourteenth centuries, hazarded the itinerant trade networks between major population areas or were relegated to lowly places within the social order of any locality. Those merchants and artisan groups, often associated with left castes of Tamil country, appear for the first time to have been able to escape many of the disabilities they previously suffered as they became integral parts of the new commercial centres. This change, until the fourteenth century at least, may have had more social than economic significance, but it laid a foundation for future urban conditions in which commerce was fostered by town-based warriors and in which the relations between local commercial groups closely linked to agrarian production (i.e. right, or *valaṅgai*, castes) and those more mobile artisan-traders and merchants of the left (or *iḏangai*, castes) fought for precedence and privilege until well into the nineteenth century.

With respect to overseas trade, it is widely acknowledged by those who have studied Asian, particularly south-east Asian, trade, that Tamil traders were very important during the eleventh century. Tamil traders were, at times at least, organized into commercial corporations (e.g. *maṇigrāmam*, *Aiññurruvar*) which were extensions of the great itinerant trade associations of peninsular India and which received some support from the Chōḷa state. From Chinese records we learn of embassies from the Chōḷas to China of about 1015. Not all of this state interest was necessarily strengthening of trade, for in about 1025, Chōḷa naval forces raided Śrīvijaya trade centres on the Malay peninsula. This feat was apparently repeated in about 1068 when the Chōḷa ruler Vīrarājendra claimed the conquest of Kaḍāram (Kedah). Such depredation must have damaged trade relations.

By the thirteenth century, these trade connections and state interest in overseas trade appear to have ended. A substantial share of the trade coming to and leaving south Indian shores is reported to have been in the hands of Muslims. On the west coast, this was reported in the eleventh century itself, while on the Coromandel Coast the same trend appears a century later. Whatever may have been the prominence of Indians in the carrying trade from Coromandel – and there is still considerable controversy about that in the historiography on south-east Asia – there is little question that Muslims became very important in the trade on the Malabar Coast (along with Jews) and progressively on the Coromandel Coast as well.

To say that overseas trade fell into the hands of Muslim traders is not, of course, to say that it passed to foreigners. On the west coast this may have been more the case, but on both of the peninsular coasts,

the control of external trade may have remained in Indian hands, albeit Muslim Indian. The significance of this change is that Muslim Indian traders, perhaps like Jain traders in Gujarat, were not integrally connected with the inland economy nor did they enjoy state protection, at least not until political power was established in the peninsula unlike, perhaps, Tamil traders of the Chōḷa period.

Notwithstanding these structural changes, the pattern of peninsular trade remained much as it had been for over a thousand years. Commodities in this trade changed but little from those reported in the *Periplus of the Eurythrean Sea*, by Ptolemy, and by Pliny in his *Natural History*. Exports from the west coast to Persia, Arabia, east Africa, and, ultimately the Mediterranean, continued to include spices (especially pepper) produced in south India as well as cinnamon and cloves which were transit goods from Ceylon, woods, sugar, dye-stuffs, and precious stones. Rice and other cereals, cocoanuts, and finished textile goods, both fine and course quality, were also exported. Ports of call on the west coast were limited in number; among the prominent were Cannanore, Calicut, Cranganore, Cochin, and Quilon. These were entrepôts to which products were carried by coastal shipping as well as overland by Indian traders. Because of the dangers of piracy, Muslim trade appeared to be conducted in fleets. Their imports included perfumes, finished cloths, wax, coral, gold and some precious stones. Horses may have been one of the trade items added in this later trade from the western world. Other imported goods to west-coast ports included camphor from Malaya and China, medicinal herbs from Sumatra, and finished ceramic and metal wares as well as linen, silk and other cloth from China.

Knowledge of trade from the Coromandel Coast in this period is based upon some Muslim reports and those of Chinese (e.g. Chau Ju-kua) and European (e.g. Marco Polo) travellers. Pepper, cotton cloth, and precious stones, especially pearls, were taken from here in return for the same array of goods mentioned above.

South Indian sources are notoriously reticent on overseas trade; hence, major reliance has been placed upon the reports of Muslims, Chinese, and increasingly, European travellers. Indeed, such slight evidence as exists suggests that overseas trade was considered a great folly, prompted by greed. The often-quoted 'charter' ('*abhaya śāsanam*') of the Kākatīya ruler Gaṇapatidēva Mahārāya in 1244 provided a fixed duty on trade, and protection of the traders and their goods from seizure at the Coromandel port of Mōṭupalli. This was treated as a boon '...to those who have incurred the great risk of a sea-voyage with the thought that wealth is more valuable than even life'.[1] Rather than conveying

[1] Hultzsch [42].

a sense of appreciation for overseas trade, as historians of south India are inclined to, this rare document in support of overseas trade and traders gives quite the opposite impression: protection of the trade was a departure from good sense and practice!

This is not surprising, for neither the specific commodities nor the volume of external trade appears to have been important to the south Indian economy of the thirteenth and fourteenth centuries. Whatever significance may have been ascribed to this trade in the Chōḷa period, when Tamil merchants and Chōḷa warriors traded and traduced in the Malay peninsula, that era was over. A few commodities, such as camphor for ritual and horses and elephants for warfare, may have been judged important, but not sufficiently so for either kings generally to create congenial circumstances for their importation or for the merchants involved to be identifiable in the public records of the time. The increased commerce of the new towns must have intersected the wider world of overseas trade, but not in ways which appear very clear.

PART I

c. 1200–1500

CHAPTER III

NORTHERN INDIA UNDER THE SULTANATE

1 Economic conditions before 1200

Materials for the reconstruction of medieval Indian economic history before the Ghorian conquests of the late twelfth century, though copious, are exceedingly fragmentary and difficult to interpret. Historians are dependent on thousands of commemorative or laudatory inscriptions, whose value in the reconstruction of the dynastic history of the sub-continent is greater than the evidence which they afford of economic conditions; upon references in Sanskrit literary works, often of stylized genres, difficult to date within a range of centuries or borrowing their matter from earlier literary models; upon accounts of Buddhist pilgrims with little concern for worldly matters; and upon reports of Arab sailors who had touched on the coast of India or information gathered by distant Arab geographers.

To these sources may be added art-historical, archaeological, and numismatic evidence. From art-historical evidence it is notoriously difficult to draw conclusions regarding economic conditions. Archaeological excavation in the sub-continent has largely concentrated on ancient Indian sites, and very little has yet emerged that throws light on the medieval period either before or after the Muslim expansion. Numismatic evidence is of value, but must of course be interpreted with caution.

Since R. S. Sharma wrote his pioneering study, *Indian Feudalism*, it has been widely held that the early Middle Ages was a period of general economic decline in the north of the Indian sub-continent. There are striking parallels in the changes which took place in India in this period to the phenomena of social reorganization in the face of dwindling resources and decaying communications in western Europe in the same centuries. The northern Indian recession, though possibly not so severe, was equally prolonged. Global historical factors which appear to have contributed to the decline in prosperity of both areas include invasion by fresh waves of barbarian central Asian tribes; the closure of the silk-route through the Tarim basin and north-west India to the Arabian

Sea; and the rise of Islam. The coastal areas of Gujarat and Coromandel remained within the network of maritime trade, and the conditions which obtained there differed from the increasing isolation and impoverishment of northern India.

In the fourth and fifth centuries in northern India the dynasty of the imperial Guptas had held sway over a large empire, while the Vākāṭakas ruled in western India. Under both dynasties there was a peak of cultural and artistic attainment, and it is likely that this was accompanied by a high level of material prosperity (though this has been questioned as regards northern India). In the sixth century the Gupta dynasty vanished from sight and the succeeding centuries show growing political confusion. The seventh-century empire of Harsha embraced most of northern India, but did not outlast his lifetime. The history of the eighth to twelfth centuries in northern India has been characterized by A. L. Basham as 'a rather drab story of endemic warfare between rival dynasties'. Until the tenth century three major dynasties, the Pālas of Bengal, the Pratihāras to the north and west, and the Rāshtrakuṭas of the western Deccan, were engaged in a contest for over-all sovereignty. The strength of the Pratihāras prevented an expansion of Arab Muslim power from Sind, conquered by Muḥammad bin Qasim's expeditionary force in the early eighth century.

During this period, landholding became the chief basis of social and political status. There was an increasing fragmentation and hereditarization of local power under what has variously been termed 'the *Sāmanta* system' or 'Indian feudalism'. An increasing portion of the agricultural product was taken from the peasantry to maintain military vassals and religious grant-holders, whose tenure generally survived changes of overlords. By the tenth century the consolidation of the powers of smaller local kingdoms or chieftainships is observable, with the proliferation of subordinate 'feudatory' tenures and rights. The complex story of the struggles and vicissitudes of these local ruling dynasties down to the Muslim expansion fills the two massive volumes of H. C. Ray's *Dynastic History of Northern India.*

With the fragmentation of power, the volume of internal as well as external trade diminished and highways deteriorated. As in western Europe, the monetary economy contracted. Gold coins were rarely issued after the fall of the Guptas and even the silver and copper coinages are scarce and poor. This was notwithstanding the very great quantities of precious metals which entered India, and were either hoarded or employed in the adornment of religious establishments or the palaces and persons of the dominant classes. The trade guilds which were such a prominent feature of ancient Indian society declined and in some cases vanish from history.

In urban life the fissiparous direction of Indian society was reflected in the proliferation of *jāti* ('caste') groups and the increasing rigidity of the hold of brahmanical Hinduism and the *varnāśramadharma*. There is some evidence that the prescriptions of brahmanical legal literature that 'impure' castes should dwell outside the city walls were actually implemented. It is during this period also that prejudices against foreign trade involving travel overseas were incorporated in brahamanical legal literature.

Nevertheless the recession of trade was not absolute. Urban life was maintained unbroken in such towns as Ujjain and Varanasi. The princely courts existed in states of great splendour, as did the great religious establishment. Considerable labour was employed in the construction of the great temples of medieval India, and we find in some areas the construction of vast tanks for irrigation. Certain foreign commodities, notably *cīnāṁśuka* or Chinese silk, appear to have circulated to remote areas of northern India, and it is likely that the better varieties of cotton cloths also were brought from very distant areas to other regional markets. Foodstuffs, particularly grains, were transported over great distances. Wheeled carts remained in use throughout the medieval period, which was not the case in many areas of the Mediterranean world, and descriptions exist of large mixed caravans setting out for journeys taking many months. The prejudice against participation in overseas trade was of unequal operation. Under the Pallava and early Chōḷa dynasties of Coromandel, and under the Pāla dynasty in Bengal, overseas trade was responsible for a great expansion of Hindu cultural influence in south-east Asia and Indonesia; the decline of the share of Hindu merchants in maritime trade there has been dated to around the twelfth century. Activities of Gujarati and south Indian Hindu merchants abroad during the thirteenth and later centuries are noticed below.

Some modern Indian historians, notably B. N. S. Yadava, have seen a turn of the tide around A.D. 1000. Gold coinage from such dynasties as the Cheḍīs of eastern Madhya Praḍesh and the Gahaḍavālas of Kanawj survives. Billon and copper coinages of the north-west of India are more plentiful, though still of rather impoverished quality. Yadava has suggested that this modest revival was in fact encouraged by mercantile activities from the Muslim Ghaznavid capital of Lahore, but substantiating evidence is lacking.

2 Agrarian economy

AGRICULTURAL PRODUCTION

A religious divine of Delhi (*c.* 1354), reflecting upon the necessity of everyone having resources (*māya*) before taking up a profession, cites the example of the peasant (*muzāri'*) who needs to have seed, a pair of oxen, and tools and implements.[1] Possession of land is not included among the essential prerequisites. Clearly, our divine was living in a period of land abundance. We know from other evidence from the thirteenth and fourteenth centuries that large tracts of the Gangetic plains were still under forest. In the thirteenth century tigers harassed wayfarers between Badaun and Delhi;[2] and in the next century we read of jungles in the middle Doab (the tract between the Yamuna and Ganga) large enough for vast numbers of peasants to take refuge in, during times of trouble.[3] It was quite different from the conditions prevailing even by the end of the sixteenth century, when land in the tract was almost fully under cultivation.[4]

Agriculture was carried on by peasants living in villages. Each village is said to have contained 200 or 300 men.[5] Cultivation was based on individual peasant farming, and the size of land cultivated by them varied greatly, from the large holdings of the *khoṭs* or headmen, to the petty plots of the *balāhars*, or village menials.[6] Below the peasantry there must have existed a large landless population, composed of the 'menial' castes. But we have no information about them in our sources, and we must assume their existence only on the basis of what we know of later conditions.

One lacks similarly any description of the tools employed by the peasants. There are no grounds for supposing that they were in any essential particulars different from those employed until the nineteenth century. But perhaps a smaller quantity of iron was used than towards the end of the last century.

Wells were probably the major source of artificial irrigation in most areas. Muḥammad Tughluq (1325–51) advanced loans to peasants for digging wells in order to extend cultivation.[7] Masonry wells as well as brickless ('cutcha') wells are described in one of our texts;[8] presumably

[1] Nizami [4], 140, 272. [2] *Fawā'id al-fu'ād* [3], 254. [3] Baranī [140], 492–3.

[4] Moreland [422], 18–19; Irfan Habib [344], 14–16.

[5] 'Afīf [143], 95. At 4.5 persons per family and taking a man to mean an adult male heading a family, the average population of a village should have been 900 to 1,350 persons. This seems to be rather on the high side. The 1872 census gave an average of 811 inhabitants to one village in the district of Meerut, the Doab district closest to Delhi.

[6] These two kinds of cultivators are mentioned as representing the extremes among primary revenue-payers in Baranī [140], 287.

[7] Ibn Baṭṭūṭa [68], 474; (trans. Husain), 88–9; also Baranī [147], 484.

[8] *Fawā'id al-fu'ād* [3], 263–4.

the latter kind were far more abundant. In some localities water blocked up by throwing dams (*bands*) upon streams provided another source of irrigation. Some of these were built by the local people and some by the government.[1]

In the fourteenth century we begin to hear of canals. Inspiration from central Asia might have played some part in their excavation. The first ruler credited with digging canals for promoting agriculture was the immigrant 'Qarauna' sultan, Ghiyasuddin Tughluq (1220–25).[2] But it was under Fīrūz Tughluq (1351–86) that the biggest network of canals known in India until the nineteenth century was created. He cut two canals, the Rajab-wāh and the Ulugh-khānī, from the Yamuna river, carrying them to Hisar. He cut still another, the Fīrūz-shāhī, from the Sutlej and one again from the Ghaggar.[3] One canal ran from Kali river in the Doab to join the Yamuna near Delhi.[4] Hisar was so well irrigated by the new canals that while previously only the rain-watered autumn crops (*kharīf*) were grown here, now the spring (*rabī'*) crops, especially wheat, could also be raised.[5] Beside these large canals there were a number of smaller canals. Some in the Multan region are said to have been dug and maintained by the local population. Fīrūz Tughluq's governor of that province asserts in one of his letters that, except for dredging the big rivers, recognized to be a charge on the state treasury, the excavation and maintenance of 'public canals' (*anhār-i 'āmma*) was the responsibility of the local people and landholders.[6] In respect of another canal, he charges village headmen and peasants to excavate it (apparently *gratis*) upon pain of death and exile.[7]

From wells and canals peasants raised water by various means. An improvement in one of the systems of water-lift probably belongs to this period. The ancient Indian noria, the *araghatta*, used to carry a string of pots fixed close to its rim; at a later period, it was given the rope-chain, enabling it to reach water at some depth. Finally, it was equipped with pin-drum gearing, which made it possible for it to be worked by animal power. This last, being the most crucial addition, was made before the sixteenth century, when Bābur (1526–30) offers the classic description of the complete machine.[8] It was the wood-and-earthen pot ancestor of the modern metalic 'Persian wheel', and might well have greatly contributed to the extension of irrigation in the Indus basin.[9]

[1] Anon. [141] *Sīrat-i Fīrūz-Shāhī*, MS., ff. 36a, 38a, 106b–107a; 'Afīf [143], 330.

[2] Baranī [140], 442.

[3] Baranī [140], MS., ff. 106b–107a; 'Afīf [143], 127. Aḥmad [145] also gives what is apparently an independent account of these canals (125–6); for an unsuccessful attempt, 130.

[4] Yazdī [144], 86. The text reads Kalpi, but, as read in E. & D. [133], III, 495, it should be Kalini or Kali river. Probably the canal also carried the waters of Hindan river.

[5] 'Afīf [143], 128.
[6] Māhrū [5], 204–5.
[7] Māhrū [5], 23.

[8] Bābur [168] (text), ff. 273v–274a; II, 486.
[9] Cf. [348], 149–54, 161.

Table 1. *Estimated yields 1290, 1640–5, 1870*

	1290	1640–5	1870
Wheat	100.00	100.00	100.00
Barley	124.44	95.85	86.50
Gram	71.11	71.98	71.43
Juar	88.89	56.12	59.52
Cotton	35.56	42.62	46.43

The peasants of the Delhi sultanate cultivated a very large number of crops. Ibn Baṯṯūṭa gives a fairly detailed description of the various crops harvested in India (i.e. the region around Delhi), in the autumn (*kharīf*) and spring (*rabī'*).[1] He tells us that *kharīf* crops were sown on the same soil as the *rabī'*. While this might have been the case on a small portion of the land (even now very limited, the so-called 'double-cropped land'), the more important fact was that the same peasant sowed different crops for two harvests in the year. Ṭhakkura Pherū of Delhi, writing *c.* 1290, gives us a list of some twenty-five crops whose yields he estimates in *mans* per *bīgha*.[2] These exclude, of course, the crops which we know were introduced after the sixteenth century, viz. maize, potato, tobacco, groundnut, chilli, and tomato. Pherū's omission of indigo and poppy is surprising; indigo, at least, was a major item of export at the time.[3] One wishes it were possible to reduce Pherū's estimates to modern weights and area measures. Since such a conversion is not possible in our present state of knowledge one could do the next best thing by converting the yields into relative quantities, with wheat as base, = 100, in order to see where the yields of various crops stood in relation to one another in 1290 and then to compare the indexed figures with those from later periods, as shown in table 1. The later figures are drawn from the schedule of standard yields of Sher Shāh (1540–5) taken as true for Delhi,[4] and the yields for Delhi estimated in 1871.[5]

For sugar cane it is difficult to attempt a comparison because it is not clear whether Pherū's estimate is in terms of cane juice or *gur* (jaggery). For most other crops, modern estimates for Delhi are not available. The table, as it is, suggests that the yields of gram and cotton have remained stable since 1290, while there has been a decline in the yields of barley and juar. Perhaps the last two crops have been partly driven off from the more fertile lands. But we need to have more evidence than the

[1] Ibn Baṯṯūṭa [68], 408–9; (trans. Husain), 18–19. [2] Sharma [492], 318–19.
[3] Petrushevsky [251], 502; see also, 'Waṣṣāf' [138], 300. [4] Abū'l Faẓl [123], (Bib. Ind.), I.
[5] *Punjab District Gazetteer* [452], XXIX A, 97–8; figures reproduced by Moosvi [417], 93.

Table 2. *Prices of agricultural products*

	c. 1310 Delhi	*c.* 1595 Agra	1861–70 Delhi	1861–70 Agra	1861–70 Aligarh
Wheat	100.00	100.00	100.00	100.00	100.00
Barley	53.33	66.67	64.28	63.38	74.15
Gram	66.67	66.67	86.58	78.91	93.63
Paddy	66.67	124.50*	–	–	90.80
Mash	66.67	150.00	–	–	107.01
Moth	40.00	100.00	–	–	84.80
High-grade sugar (*nabāt*)	1,333.33	2,000.00	–	–	–
White sugar	800.00	1,066.67	–	–	642.05†
Til Oil	533.33	666.67	–	–	–

* Price of *Biranji-i Sāthī*, converted into that of unhusked rice. The conversion has been made on the basis of the difference in average price of husked and unhusked rice at Aligarh for the period 1861–70, as reported by Atkinson [224] (2), 455–6.

† Prices in this line are for *Shakar-i tarī* (Baranī), *Shakar-i safed* or white sugar (Abū'l Faẓl) and refined sugar (1861–71).

estimates of a lone writer preserved in a manuscript of unknown date and quality, before we can venture upon such speculations with any confidence.

Another set of data which may be used are the prices of agricultural products given in Baranī, Abū'l Faẓl and nineteenth-century statistics. These could help us trace changes in the state of supply of each commodity, in relation to wheat, assuming that the pattern of demand has remained largely the same. In table 1 we have Baranī's prices for the reign of 'Alā'u'ddīn Khaljī (1926–1316), say *c.* 1310, at Delhi,[1] and Abū'l Faẓl's prices for Āgra around 1595.[2] For the recent period we have taken the average prices current at Delhi, Agra, and Aligarh for the decade 1861–70.[3]

Table 2 suggests that among the *rabī'* food crops, viz. wheat, barley and gram, the relative prices of barley and gram have risen since the fourteenth century. 'Afīf, speaking of the prices prevalent in the reign of Fīrūz Tughluq (1351–86), quotes barley and gram at just half the rate of wheat.[4] The three *kharīf* food crops, viz. paddy and the two pulses

[1] Baranī [140], 304–5, 310.

[2] Abū'l Faẓl [123], I, 60–65.

[3] The averages for Delhi and Agra have been worked out from the official *Prices and Wages* the average prices for Aligarh are given in Atkinson [224], II, Part I, Aligarh District, 479.

[4] 'Afīf [143], 294. 'Umarī [69] (trans. Siddiqi and Ahmad), 59, on the other hand, rates barley at 75 per cent of wheat in its list of the Delhi prices in the reign of Muḥammad Tughluq (1326–51).

māsh and *moṭh*, were very heavily undervalued in 1310, but as highly overvalued in 1595, compared to 1861–70. The price for high-grade refined sugar was higher in 1595 than in 1310;[1] a comparison with modern prices is not possible, the price for this variety being no longer quoted. Ordinary sugar shows no decline, in the net, in its price relative to wheat, between 1310 and 1871.[2]

It would seem from the relative prices prevailing in 'Alā'uddīn Khaljī's time that the crops which needed artificial irrigation (e.g. wheat, sugar cane) were more highly valued than the crops that could largely do without it. Thus the *kharīf* food crops, raised solely on rain and inundation, fetched very low prices. The hardier *rabī'* crops, barley and gram, also were rated lower in respect of wheat and sugar cane, than at later periods. If our data are reliable, we may assume that land abundance of the time encouraged a more extensive system of agriculture, and so ensured a larger production of rain-grown crops, with a consequential relative restriction of crops needing higher inputs, especially in the form of artificial irrigation. The lower relative supply of the latter naturally set a much higher value on them in comparison with rain-grown crops.

The large area of waste land, including fallow, and forest, mean that there was little shortage of pasturage for cattle. Speaking of the two villages at the place where Fīrūz Shāh established his city of Hisar, 'Afīf says that one of them had fifty *kharaks* (cattle-pens), and the other, forty; no village in the area was without its *kharaks*.[3] The Arabic work *Masālik al-abṣar* says that in India cattle were innumerable and sold at low prices.[4] The large numbers of cattle might partly explain the fact that the backs of the bullocks, and not bullock-carts, were the principal means for transporting grain in the villages.[5] The manufacture and sale of *ghī*, or clarified butter, was apparently an important and profitable trade. In the district of Ajodhan (Pakpattan) in the Panjab, one seller of *ghī* in a village could claim that he had resources enough to buy forty or fifty slave-girls.[6]

[1] The increase would be still greater if we trust 'Umarī's [69] price for *nabat*, viz. 666.67, with wheat = 100.

[2] 'Umarī's [69] price for *Shakar-i tarī* is still lower than that of Baranī [140], giving an index figure of 533.33. But a MS. of 'Afīf gives it the impossibly high value of 1750 in terms of wheat (= 100) ('Afīf [143], 294n).

[3] 'Afīf [143], 124–5.

[4] 'Umarī [69], 34. The prices given in this work (p. 59) for cow and buffalo are fantastically low, being ten to eleven times the price of 1 *man* of wheat. While the weight of a *man* of the fourteenth century cannot be established, it could not have exceeded the weight of Akbar's *man* which was 55.32 lb. avoirdupois (Habib [343], 368). Baranī [140], 315, gives prices for milch cow and milch buffalo that work out, respectively, at about 20 to 26 and 64 to 77 times his price for 1 *man* of wheat.

[5] Ibn Baṭṭūṭa [68], (text), 526–7, (trans.), 146.

[6] Nizami [4], 236–8.

It is probable that the fourteenth and fifteenth centuries saw the introduction of sericulture, or the breeding of the mulberry silkworm for producing true silk. Other silks, e.g. tasar, eri and muga, have probably been collected since ancient times in India. But sericulture proper reached India from China very slowly and possibly by a long and devious route. Khotan received it in the fifth century, and Sassanid Persia shortly afterwards.[1] Persian sericulture obtained another spurt of development under Mongol rule (thirteenth and fourteenth centuries).[2] However, there was as yet no sign of its presence in India. As late as the middle of the fourteenth century, Ibn Baṭṭūṭa does not refer to silk among the products of Bengal.[3] But in 1432, the Chinese navigator Ma Huan, giving an account of the same province, says: 'Mulberry trees, wild mulberry tree, silk worms and cocoons, all these they have.'[4] The first firm evidence for sericulture in Kashmir is no older than the *Tārīkh-i Rashīdī* completed in 1547.[5] Earlier references to silk-weaving in Kashmir occur in Kalhana (*c.* 1150) and Śrīvara (fifteenth century);[6] but these do not necessarily imply the existence of sericulture, since the silk could well have been imported from Khotan or even China.

On Indian fruit-growing, Ibn Baṭṭūṭa's account seems most instructive. The mango was the most highly prized fruit; but it was entirely seed-grown, the practice of grafting not being mentioned.[7] Grapes were rare and were raised only in a few localities besides Delhi.[8] These were possibly cultivated by peasants, for we find Muḥammad Tughluq urging that peasants be encouraged to shift to raising grapes (and dates!).[9] But his successor Fīrūz Tughluq himself laid out 1,200 orchards in the vicinity of Delhi to grow seven varieties of grapes. The produce of these vine plantations was so abundant that the price of grapes is said to have fallen to a rate just five times that of wheat.[10]

RURAL CLASSES

It is not possible to draw a firm picture of the system of agrarian relations in the sultanate period. The evidence is so fragmentary. We can only present such evidence as we have for the various aspects of the system, and attempt, on its basis, a tentative reconstruction.

[1] Laufer, *Sino-Iranica*, p. 537.
[2] Petrushevsky [251], 502. The quality of Gilan silk greatly improved during this period.
[3] Ibn Baṭṭūṭa [68], (text), 610–11; (trans. Husain), 234–5.
[4] Ma Huan [59] (trans. Mills), 163.
[5] Dughlāt [146] (trans. Elias and Ross), 425. See also: Abū'l Faẓl [123] (1), 562–3.
[6] Chandra [256](5), 10 and (6), 43.
[7] Ibn Baṭṭūṭa [68] (text), 407–8; (trans.), 16–7.
[8] Ibn Baṭṭūṭa [68] (text), 408; (trans.), 17.
[9] Baranī [140], 498–9.
[10] 'Afīf [143], 295–6. The price of grapes fell to 1 *jītal* per *ser*. 'Afīf says earlier (p. 294) that wheat fetched 8 *jītals* to a *man* (= 40 *sers*).

To begin with, it would seem that there was little question of the peasants claiming property rights over any parcel of land. Land was abundant, and the peasant could normally put up with a denial of his right over the land he tilled. What he feared, on the contrary, was a claim of the superior classes over his crop, and more still over his person. This is brought out in an interesting document of Fīrūz Tughluq's time (1351–88).

A village was assigned to a trooper called Ẓiā'uddīn, the sovereign having given him the right (*ḥaqq*) over its poll tax (*jizya*) and (the tax on) cultivation (*zirā'at*), so that he might spend the income on himself and his military equipment. The peasants, however, fled the assigned village and settled in villages of which the *qāẓīs* of Thanesar were the *māliks* (literally, proprietors). Ẓiā'uddīn insisted that the emigrants be returned to his village. The *qāẓīs* retorted that the peasants were 'free men by birth' (*ḥurr aṣl*), and could not be forced to go back against their will. This drew the explanation that no one was claiming 'ownership of their persons'. What was being pressed was the right to collect the poll tax (*jizya*) from the peasants. This was the sovereign's right and being a tax on person could not by fact of the payers' emigration pass from the assignee of that right to the *māliks* of their present villages. As for the *kharāj* or land tax, these peasants had, by abandoning the land on which the tax was levied (*'arẓ-i kharājī*), reduced the revenue of that village. Their residence in the village was thus a necessary condition for the collection of the land tax; and for this reason, too, they were not to be enticed away by the other *māliks* whose duty now was to return them to their original village.[1]

The peasants were thus not masters of their domicile, and were, in effect, no better than semi-serfs. But like serfs too they had certain things that they could own, such as seed, cattle and implements.[2] They also sold their produce in order to pay the land revenue in cash.[3] These were sufficient factors for the existence or emergence of economic differentiation within the peasantry. Baranī designates men of the highest stratum among the peasants as *khoṭs* and *muqaddams*, headmen. The term *khoṭ* remained in use in the Doab until the middle of the sixteenth century,[4] while it had a longer survival in Gujarat and the Deccan.[5] The other designation *muqaddam* has come down to the present century.

Before 'Alā'u'ddīn Khaljī adopted his measures aimed at bringing the

[1] Māhrū [5], 61–3.
[2] Nizami, ed. [4], 140, 272.
[3] Baranī [140], 307, says that 'Alā'u'ddīn Khaljī ordered officials to collect the *kharāj* from the peasants (*ri'āyā*) with such rigour that they were forced to sell their grain to merchants at the prices fixed by the Sultan, right after harvesting.
[4] Habib [347], 212–17.
[5] Moreland [428], 225–6.

khoṭs to heel, they are alleged to have claimed exemption from paying the three major taxes, viz. land revenue (*kharāj-jiziya*), house tax (*gharī*),[1] and the cattle tax (*charāī*). Furthermore they levied a cess of their own (*qismat-i khoṭī*) on the villagers. As a result, (some of?) the *khoṭs* became prosperous enough to ride horses, wear fine clothes, and even eat betel leaf![2] 'Alā'u'ddīn prohibited the *khoṭs* from levying any cess and forced them to pay the full land tax on their cultivated lands; he also levied *gharī* on every house and *charāī* on every head of milch cattle thus not exempting the *khoṭs* here as well. As a result the *khoṭs* are said to have become so poor that no trace of gold or silver or money remained in their houses and their wives were compelled to work as maidservants for wages in 'the houses of Muslims'. Ghiyāṣu'ddīn Tughluq (1320–5) modified these stern measures to some extent: though still forbidding the *khoṭs* from levying any cess upon peasants, he exempted them from paying tax on their own cultivation and cattle.[3] Clearly, then, the *khoṭs* and *muqaddams* were peasants, but peasants standing on the borderland of the rural aristocracy: when prosperous, they could imitate the ways of a knight; when hard-pressed, they would sink to the level of ordinary cultivators and even wage-earners. When, during the time of Fīrūz Tughluq the pressure on this stratum practically disappeared, 'horses, cattle, foodgrains and goods filled the houses of *khoṭs* and *muqaddams*'.[4] Another chronicler describes their affluence (which he ascribes impossibly to the peasants as a whole) in these words.

In the houses of the *ra'iyat* (peasantry), so much grain, wealth, horses and goods accumulated that one cannot speak of them. Every one had large amounts of gold and silver and countless goods. None of the women-folk of the peasantry remained without ornaments. In every peasant's house, there were clean bed-sheets, excellent bed-cots, many articles and much wealth.[5]

Above the *khoṭs* and *muqaddams*, stood the rural aristocracy. The composition and power of this class had been subject to much change. The chiefs opposing the Ghorians and the early Delhi sultans are designated *rāis* and *rānas* by Minhāj Sirāj.[6] The cavalry commanders or knights of the *rāis* were called *rāwats*.[7] Baranī follows similar usage in his account of thirteenth-century events. He puts in the mouth of Balban (1266–86) the statement that though the *rāis* and *rānas* might have in all 100,000 *pāyaks* (foot soldiers) and *dhānuks* (archers), they could not

[1] Cf. Hodivala [369], 278.
[2] Baranī [140], 287, 288, 291.
[3] Baranī [140], 430.
[4] Baranī [140], 554.
[5] 'Afīf [143], 99–100.
[6] Sirāj [136], I, 229, 399, 481, 485; II, 17, 18, 57, 65, etc. Wherever the editor reads *rāyagān*, one should read *rānagān*, as in the Bib. Ind. ed. The plural of *rāi* is *rāyān*; this occurs, in: Sirāj [136] I, 229; II, 17.
[7] Sirāj [136], II, 65.

stand before 6,000 to 7,000 cavalry of Delhi.[1] The *rāwats* were men of a lower status than *rānas*: when Malik Chhajjū, governor of Kara, revolted against Jalālu'ddīn Khaljī (1290–6), '*rāwats* and *pāyaks*' came in enormous numbers to join him.[2] The existence of an earlier feudal hierarchy of *rāja*, *rānaka* and *rāuṭa* is established fairly well, by epigraphic evidence from many parts of northern India.[3] It would seem that once the major forts were occupied by the conquerors, the sultan and his *muqṭi's* (governors) made use of the existing political structure for quite some time, imposing tribute on the *rā'is* and *rāna[ka]s* while expecting them to collect taxes as they did before. As a result, the immediate control of the older ruling class over the land and the peasantry continued. This would explain the kind of transactions recorded in a brick inscription of 1217 found near Jaunpur,[4] and a copper plate from Kasrak (Shahjahanpur district) of 1227.[5] The latter inscription acknowledges Iltutmish as the sovereign. In both records, *rāuṭas* mortgage lands against loans among themselves, with a *rānaka* standing surety in the first transaction.

Even when the authority of the sultanate over the country was asserted more vigorously, and an arbitrary tribute was replaced by a land tax assessed on the peasants, the older aristocracy still had a place. This is brought out by the episode of Ghāzī Malik, 'Alā'u'ddīn Khaljī's governor of Dipalpur, and Rāna Mal Bhaṭṭī. The latter was one of the *rāis* of the region of Dipalpur.[6] When he refused to marry his daughter to Ghāzī Malik's brother, Ghāzī Malik was advised to demand the year's revenue 'from him' all at once. Accordingly,

Sultan Tughluq (Ghāzī) went to the *talwandī* (territory) of Rāna Mal. He demanded the revenue for the year in cash. He subjected all the *muqaddams* (headmen) and *chaudhurīs* of the country to bamboo blows and torture. He demanded the entire revenue in cash. The whole country of Rāna Mal became desperate. All people were faced with ruin. Those were the days of Sultan 'Alā'uddīn; none dared make any babble or noise.[7]

[1] Baranī [140], 52.
[2] Baranī [140], 182.
[3] When a *rāuta* set up a pillar in the Gahadvala kingdom, he took care to mention his overlord, the *rānaka* of Belasar, and, above him, the *rājā* of Kanyakubja (Kanauj) (Belkhara stone inscription, 1197; see Ray [463], (I, 545–6). In twelfth and thirteenth century Gujarat, according to the *Lekhapaddhati* documents, 'the king or his *mahāmātya* (minister) granted fiefs to *rānakas* and they sub-infeudated land to *rājaputras*'. (Sharma [493], 201.) *Rāuta* and *Rājaputra* are the Prakrit and Sanskrit forms of the same word.
[4] Agrawala [41], 196–201. *Rāuta* is represented by the abbreviation *rā*. The sense of 'cultivated land' given to *pravapiṇi* in the trans. is by no means certain.
[5] The inscription is in the Lucknow Museum. A deciphered text, trans. and interpretation are being published by my colleague, Dr Pushpa Prasad, to whom I am indebted for all my information about it.
[6] That a *rāna* should be counted among *rā'is* or *rājās* reveals a considerable depreciation of the latter title.
[7] 'Afif [143], 37–8.

Ultimately, not able to see the distress of his peasantry, the Rāna surrendered his daughter. The interesting point in this story is that the peasantry had seemingly two masters: the sultan's governor and the *rāna*. The governor could initially demand the land revenue from the *rāna*; so presumably the *rāna* normally collected the tax from the peasantry. Upon the *rāna's* inability to pay the amount demanded, the governor would enforce a direct collection from village headmen and *chaudhurīs*. We are left to assume that by now an advanced stage had been reached in the subversion of the older rural aristocracy, though the old forms had not yet been destroyed.

It is possible, however, that the fourteenth century saw the completion of that process of destruction, which was also at one and the same time a process of transformation of the older aristocracy into a new superior rural class. From the point of view of the sultanate ruling class, the existence of an intermediary class in the countryside was essential for its own appropriation of a large amount of agricultural surplus in the form of land revenue. This superior class could not be created out of nothing: it had to absorb elements of the older aristocracy, while perhaps admitting some from the village headmen (*khoṭs* and *muqaddams*). The *chaudhurī* seems to have been the first (and, possibly, the foremost) representative of this new emerging class.

He is not mentioned in Minhāj Sirāj or any earlier Persian source, nor is he to be found in the epigraphic records of the thirteenth century or earlier. But with Baranī, writing in the middle of the fourteenth century, he appears as the highest rural magnate answerable for land revenue to the authorities.[1] Ibn Baṭṭūṭa defines his position in more express terms:

> *Ṣadī* in this country is a collection of a hundred villages. The territories of the kingdom (literally, city) are divided into *ṣadīs*. Each *ṣadī* has a *jautarī* (*chaudhurī*), who is the chief of the Infidels of the district, and a *mutaṣarrif* (official), who collects the taxes.[2]

Ibn Baṭṭūṭa's reference to *ṣadī* (Persian *ṣad*, hundred) is curious. He also refers to a district designated *hazār*, implying a larger division of 1,000 villages.[3] No other source or document refers to this grouping of villages by hundreds. By the middle of the fourteenth century the basic collection of villages came to be called *pargana*, an Indian name, which

[1] See especially Baranī's [140] account of 'Alā'u'ddīn Khaljī's agrarian measures, p. 288. Baranī's earliest reference to the *chaudhurīs* occurs on p. 106, when he says that '*rānas* (read *rānagān* for *rāyagān*), *chaudhurīs* and *muqaddams*' waited upon Balban with gifts, as he returned from Bengal to Delhi.

[2] Ibn Baṭṭūṭa [68] (text), 507, (trans.), 123. Arabic lacks the letters corresponding to Sanskrit/Prakrit *ch* and *dh*, and this explains Ibn Baṭṭūṭa's spelling of *chaudhuri*.

[3] Ibn Baṭṭūṭa [68] (text), 184, 525: the *hazār* of Amroha.

apparently won recognition in the sultanate rather late.[1] In the sixteenth and seventeenth centuries the *chaudhurī* was the hereditary *zamīndār* held answerable for the collection of revenue in each *pargana*.[2] Their common association with the office of *chaudhurī* suggests that the *ṣadī* and *pargana* were in practice identical units. It is also likely that under other names the division had an older history, and was originally the result of a distribution of villages in groups of '84' (the later *chaurāsīs*) among the clan of the Gurjara-Pratihara and Chaulukya dominions.[3] We may then suppose that the descendants of the chiefs who held control over these units (as *rānakas* or under other designations) had now largely reappeared as *chaudhurīs*, doubtless shorn of much of their old powers and authority, but still forming part of the rural aristocracy and taking a share of the revenue.

The *chaudhurīs* constituted only one element of the superior rural class. It seems that about the middle of the fourteenth century, the alterations in the agrarian system had proceeded far enough for the entire rural population to be divided, from the point of view of the revenue-receiving ruling class, into just two classes, viz. 'the peasants (literally villagers, *dahāqīn*) and *zamīndārs*', both to be described in moments of irritation as 'subjects (*ri'āyā*) only in appearance', who 'pay revenue only when faced by terror of the army and blows of the dagger'.[4] The word '*zamīndār*' was now pressed into a new use,[5] as a blanket term for the entire superior rural class. Fīrūz Tughluq in his proclamation issued on the eve of his expedition to Bengal in 1353, implies that *zamīndārs* comprised 'people like *muqaddams*, *mafrozīs*, *māliks*, etc.'.[6] *Muqaddams*, as we have seen, were identical with *khoṭs*. *Mafrozīs*, to judge from Baranī's use of the term, were those to whom the government granted control over land in place of the earlier dominant elements.[7] They were thus new persons set up to perform functions of the old aristocracy. *Mālik* was a term used rather freely for any person with any

[1] Moreland [428], 18–19, notes the use of the term in 'Afīf [143], 99 (see also: Afīf [143], 286, 295). But it occurs in 'Isāmī [139], 108, 398, once with reference to Delhi and then in the context of the Deccan. Quite obviously the term had come into use as designation for smaller territorial divisions by the closing years of Muḥammad Tughluq. It is curious that Baranī should never have employed the term. The Sanskrit original was probably *pratigaṇaka*.

[2] Habib [343], 291–4.

[3] U.N. Ghoshal, *Hindu Revenue System*, Calcutta, pp. 241, 259–60. For a list of *chaurāsīs* in Uttar Pradesh, see: Elliot [291], II, 47–78. Numerous *chaurāsīs* also exist in Gujarat.

[4] Māhrū [5], 75.

[5] It was previously used for Hindu chiefs outside the sultanate (Moreland [428], 18n.). The old use is still found in 'Afif [143], 170.

[6] Māhrū [5], 17. The proclamation is undated; for the date of the expedition see: Aḥmad [145], 124–5.

[7] See the use of the words *mafroz* and *mafrozī* in Baranī [140], 58. On p. 106 he groups together *mutaṣarrifs* (officials), *maliks*, *mafrozās*, *rānas*, *chaudhurīs* and *muqaddams*. *Mafroz* is defined in Ghaznavī [122], f. 29a, as a charge given in lieu of obligation to pay (revenue to the government). This work was written in Fīrūz Tughluq's time.

superior (saleable?) right over land, though the linguistically allied terms *milk* and *amlāk* referred to revenue-grants. In other words, *zamīndārs* tended to form a comprehensive category embracing all kinds of superior right-holders. It is possible that the common term also implied a process by which these rights, originally of great variety and complexity, were tending to be shaped into a simpler or more uniform pattern.

The process begun in the fourteenth century was possibly interrupted in the fifteenth owing to political circumstances. The Delhi sultanate became very restricted; and independent units, fragments of the great sultanate, went their own separate ways. Chroniclers could no longer record situations true for large regions; and there is also a plain deficiency of documents. Within the reduced limits of the sultanate we see local hereditary chiefs, the Khokhars in the Panjab, the Khānzādas in Mewat, the chiefs of Gwalior, of Katehr, and so on, becoming powerful and exercising authority over large tracts.[1] It is possible that this represented a partial – but only a partial – revival of the older rural aristocracy.

The tradition preserved of the measures taken by Farīd (the later Sher Shāh) as revenue-collector of his father's districts in Bihar and eastern Uttar Pradesh during the reign of Sikandar Lodī (1489–1517), shows that villages were divided into two groups. One set was held by the *ri'āyā*, apparently comprising headmen (*muqaddams*) and cultivators (*muzāri's*) and the other by *zamīndārs*, who too are indifferently designated *muqaddams*. Of the latter, Farīd is reputed to have said, in a manner quite reminiscent of 'Alā'u'ddīn Khaljī's denunciations of *khoṭs* and *muqaddams*:

These mischievous people never pay money from their own coffers. When the person in authority (*ḥākim*) releases them, after getting money from them (in payment of revenue), they take to theft and highway robbery in order to replenish their coffers. They take money by force from the weak and indigent peasants who live under them. They collect more from their area (*wilāyat*) than they pay to the Dīwān [by way of revenue].[2]

Another interesting document[3] of about the same period sheds light on the size of the share of the surplus appropriated by the superior right-holders in areas closer to Delhi. This document, dated 1530, records the transfer of two rights over a village in the district (*khiṭṭa*) of Shamsābād in the Doab: the right of *ḥaqq wa milk-i khoṭī* (right and ownership of *khoṭī*) and *kharāj-in'ām* (right to land tax, held by grant).

[1] See the detailed chronicle of the Delhi sultanate for this period, Sīhrindī [145], 141–244.

[2] Sarwānī [148], ff. 10b–15b. The passage quoted is on f. 15a. The two *parganas* which were under Farīd's jurisdiction were Khāṣpūr Ṭānḍā (in Uttar Pradesh) and Sasharām (in Bihar).

[3] The document is discussed and calendered in: Habib [347], IV, 208, 220–1.

The former was sold at the total price of 700 *ṭankas* and the latter leased at an annual payment of 300 *ṭankas*. Here the chance possession in the same hands of the two kinds of claims to surplus has given us the opportunity of comparing their relative magnitude. The annual net realization of the land tax alone amounted to 43 per cent of the capitalized value of the annual income from the local magnate's 'proprietary' right. Surely, the income from proprietary right could not, in these circumstances, have been more than a subordinate share of the surplus. For example, even if the buyer of the *k͟hoṭī* right expected to recover the price in as few as five years, his expected net annual income would still have been less than half of the net collection of land revenue. This may give us the measure of the relative wealth and power of the sultanate ruling class (deriving its income from land revenue) and the superior rural groups (their income resting on claims upon the peasants based on custom and inheritance).

AGRARIAN TAXATION

It is unfortunate that we cannot satisfactorily establish how the agricultural surplus was appropriated in the period before the G͟horian conquests. There is no means of knowing if it was exacted from the primary producer in the form mainly of landowners' claims or of taxes. While the inscriptions give us the names of a large number of taxes, their nature is a matter of speculation; almost nothing can be said about the share of produce that they represented.[1]

With the G͟horian conquests and the establishment of the sultanate, the older system, or systems, were not immediately eliminated, but continued to function though with the superimposition of the demands of a new ruling class. As already suggested, the demand in most of the conquered areas took initially the form of a tribute to be paid in a lump sum by the potentates surviving from the older régime. But in 'rebellious territories' (*mawāsāt*) even such arrangements were not possible. These territories stretched from the middle of the Doab, across the Ganga to Katehr (modern Rohilkhand) and then to Awadh and Bihar. Minhāj Sirāj refers to numerous expeditions led into the *mawās* territories to extort tribute or plunder: the plunder obtained was probably mostly in the form of cattle and slaves.[2]

[1] Lists of the various known taxes with references to modern views on them are conveniently assembled in: Gopal [323], 32–70.

[2] Sirāj [136], II, 17–18, 26, 27–8, 29, 53, 57–8, 71–2, 77. For 'numerous cattle, horses and slaves' secured in one expedition, see p. 58. An anecdote is told in: Malik [3], 278–9, 340, of a woman enslaved in the *mawās* of Katehr and separated from her son. See also: Nizami, ed. [4], 236–8. As a result of one of Balban's expeditions into central Doab, says Baranī [140], 57, 'slaves, beasts of burden and cattle' became cheap in Delhi.

In such conditions the economic basis of the sultanate could hardly be ever stable or firm, and it is not surprising to read that the nobles of Balban (1266–86) were always heavily in debt to the great merchants and moneylenders of Delhi.[1] With the passage of time and the growing authority of the sultan's government, it was inevitable that attempts would be made to increase revenue by collecting taxes modelled on those levied in the Islamic world, with which the new rulers were familiar. Quite possibly in the western Panjab, which had seen two centuries of Ghaznavid rule, the 'Islamic' taxation system was already in operation. By the end of the thirteenth century, it might have been imposed in the neighbourhood of Delhi. However, though such a process must have taken place, it is left entirely unrecorded. What is recorded is the seemingly sudden imposition of a uniform taxation system over a very large part of northern India by Sultan 'Alā'u'ddīn Khaljī (1296–1316).

The classic account of 'Alā'u'ddīn Khaljī's measures is given by Baranī. The sultan decreed that three taxes were to be levied on the peasantry, *viz.* the *kharāj* (also called *kharāj-i jiziya*), or tax on cultivation (*zirā'at*); *charāī*, a tax on milch cattle; and *gharī*, a tax on houses. As for *kharāj*, all who engaged in cultivation, whether of lands of large or of small extent, were to be subject to '(the procedure of) measurement (*masāḥat*) and (the fixation of) the yield per *biswa* (*wafā'-i biswa*),[2] and were, without any exception whatsoever, to pay half'.[3] The statement, being couched in technical language, is at first sight obscure, but its sense can be reconstructed. The land cultivated under each crop was measured; the yield was estimated per unit of area (*biswa*); and then by multiplying the area by the yield the total produce was to be worked out. Half of the produce thus determined was to be exacted uniformly from every peasant without exception. The procedure would seem to have been very close to what was called *kankūt* in later times.[4]

Once fixed in kind, the tax could be taken in cash. Baranī says that the sultan ordered the revenue collectors to demand the tax with such rigour that the peasants were forced to sell their produce immediately.[5] This implies that the tax collectors demanded payment in cash; otherwise, the peasant would not be forced to sell. The statement that 'Alā'u'ddīn required peasants to pay tax in kind and not cash, occurs elsewhere in Baranī,[6] but has reference only to areas in the Doab lying

[1] Baranī [140], 120.

[2] Moreland [428], 226, discovered the technical meaning of *wafā'*, yield, in 'Afīf [143], 180: 'Every year the cultivators saw their *wafā'*, increasing... If they put in one fistful of seeds into the earth, they obtained 70 times or 700 times more in *wafā'*.' A *biswa* is one-twentieth of a *bīgha*, the common measure of area in northern India.

[3] Baranī [140], 287.

[4] Habib [343], 198–200.

[5] Baranī [140], 304–5, 307.

[6] Baranī [140], 305–6.

in the *khāliṣa* (reserved for the sultan's treasury). At yet another place, Baranī says that the entire Doab was brought under the *khāliṣa*, and the income from the revenues (*maḥsūl*) went to pay his soldiers in cash.[1] This again shows that the tax was collected in cash even in the *khāliṣa*. One can only reconcile these differing statements by assuming that the tax was normally collected in cash; and that it was only as a special measure that 'Alā'u'ddīn Khaljī encouraged collection in kind in some of the *khāliṣa* areas so as to obtain corn for his granaries to serve as reserve stocks against scarcities.[2]

Baranī says that the new taxation system was imposed over a very large region extending from Dipalpur and Lahore in the Panjab to Kara and Katehr (in Uttar Pradesh), and to Nagaur and Chha'in (in Rajasthan).[3] While 'Alā'u'ddīn Khaljī's vigour and harshness doubtless contributed to the success of the measure, the measure itself was surely an extension of what was actually in force already in some areas rather than a totally new system. Its affinity to the classic Islamic system where the *kharāj* was the main tax representing the bulk of the agricultural surplus is all too obvious.

Baranī claims that the new system was designed to prevent 'the burden of the strong falling upon the weak'.[4] That is, the *khoṭs* and *muqaddams* could not exempt themselves from tax and make other peasants bear the entire tax due from the village. This would imply that 'Alā'u'ddin Khālji imposed the revenue demand on each cultivator separately. But one may well doubt whether this could have been done in practice. Even had this been done, and had every peasant paid in money the value of half his produce, the tax would have remained very heavy and regressive. A government levying such a tax could, therefore, hardly have protected the 'weak', except in so far as it tried to exclude or restrict further exploitation by the rural upper strata in order to safeguard its own share. The real face of 'Alā'u'ddīn Khaljī's agrarian administration is perhaps most truthfully revealed by 'Afīf when he says that however great the oppression of the peasantry – in this particular case a demand for advance payment of the year's revenue in cash – no one 'dared make any babble or noise', during the reign of that sultan.[5]

'Alā'u'ddīn Khaljī's taxation system was probably the one institution from his reign that lasted the longest, surviving indeed into the nineteenth or even the twentieth century. From now on, the land tax (*kharāj* or *māl*) became the principal form in which the peasant's surplus was expropriated by the ruling class.

[1] Baranī [140], 323–4.
[2] The purpose is explicitly stated in Baranī [140], 305–6.
[3] Baranī [140], 288. Baranī gives names of a number of other places included within the region; all of them are situated within the limits indicated by the six places mentioned in our text. For Chhā'in (written Jhāin) see: Gupta [337], III, 209–161.
[4] Baranī [140], 287.
[5] 'Afīf [143], 37–8.

Ghiyāṣu'ddīn Tughluq (1320–5) tried to modify 'Alā'u'ddīn Khaljī's system by giving certain concessions to *khoṭs* and *muqaddams*. As already noticed, he confirmed 'Alā'u'ddīn Khaljī's injunctions that they were not to levy any cess (*qismāt*) in addition to the *kharāj*, on the peasantry; but they themselves were to be exempted from paying tax on their cultivation and cattle. The express purpose was to employ the headmen for collecting the tax from the peasantry and pay them for their 'manifold duties' by these concessions.[1] Ghiyāṣu'ddīn also sought to give relief to the peasantry as a whole by remitting additional cesses that used to be levied on all sown lands both such as yielded crops and as failed to do so.[2]

The pendulum swung again under Muḥammad Tughluq (1325–51). Under this sultan, first of all, the entire empire, including Gujarat, Malwa, Deccan, south India and Bengal, was brought under the same rigorous system of taxation as prevailed in the villages of the Doab.[3] In the second stage, the sultan is said to have attempted a substantial enhancement in the scale of agrarian taxation. The statement that the increase was of the order of one to ten and one to twenty can only be a rhetorical one, but is suggestive of the impression of a dramatic increase created upon contemporaries. Two chroniclers suggest different ways in which the increase was brought about. Baranī says that new additional imposts (*abwāb*) were levied on the peasantry.[4] Yaḥyā says that the three major taxes were more vigorously assessed and collected:

> The *gharī* and *charāi* were imposed in such a manner that the cattle were branded and the peasants' houses were counted. They measured the fields, and took officially decreed yields (*wafā'-hā-i farmānī*) and calculated with decreed prices (*nirkh-hā-i farmānī*).[5]

What is implied in Yaḥyā's second sentence is that, while assessing the land revenue a standard yield and not the actual yield was applied to the area measured, in order to obtain the total assessment in kind.[6] Further, when commuting this into cash, not the actual prices, but officially 'assumed' prices were used. The result of this device was to

1 Baranī [140], 429–31.

2 Baranī [140], 429. The terms used in Baranī are *muḥaddiṣāt o qismāt-i būd o nābūd*. Moreland's translation, 'innovations and apportionments based on crop failure' ([428], 227), seeks to go by the literal meanings of the words. A document in Māhrū [5], 48, makes the technical sense clear. A tax imposed on the people of Uchh is first called *muḥaddiṣ* and then *qismat*. *Muḥaddiṣāt* and *qismāt* are only plural forms of these words and must mean simply taxes. Ghaznavī [122], f.19b, defines *muḥaddiṣ* in its technical sense (*dar iṣṭilāḥ*) as anything realised from fields and houses in addition to the basic tax (*wājib*). From the terminology in use in Mughal times, we know that *nābūd* meant sown land affected by crop failure. *Būd* must, therefore, mean land successfully harvested.

3 Baranī [140], 468–9.

4 Baranī [140], 472–3.

5 *Sīhrindī* [145], 101–2.

6 It is interesting to note that Sher Shāh too similarly applied standard yields (*rai's*) in determining the land revenue (Moreland, *JRAS* 1928, 447–59).

inflate the tax heavily since the officially decreed yields and prices were probably much higher than the actual in most localities.

These measures brought about an agrarian uprising of great intensity over a very large area near Delhi and in the Doab. Baranī says,

> Such peasants as were weak and without resources were completely made prostrate, and the rich peasants who had resources and means, turned rebels. Whole regions were devastated. Cultivation was totally abandoned. The peasants of distant regions, hearing of the ruin and destruction of the peasantry of the Doab, fearful that the same orders might be issued for them as for the latter, turned away from obedience and fled to the jungles. The two years that the Sultan was in Delhi [*c.* 1332–4], the country of the Doab, owing to the rigours of revenue-demand and the multiplicity of *abwāb* [additional cesses], was devastated. The Hindus set fire to the grain heaps and burnt them, and drove away cattle from their homes. The Sultan ordered the *shiqqdārs* and *faujdārs* [revenue collectors and commanders] to lay waste and plunder the country. They killed many *khoṭs* and *muqaddams*, and many they blinded. Those who escaped gathered bands and fled into jungles; and the country became ruined. The Sultan in those times went to the district of Baran [modern Bulandshahr], on a hunting expedition; he ordered that the entire district of Baran be plundered and laid waste. The Sultan himself plundered and laid waste from Kanauj to Dalmau. Whoever was captured was killed. Most [peasants] ran away and fled into the jungles. They [the sultan's troops] surrounded the jungles and killed every one whom they found within the jungles.[1]

The chronicler's language leaves us in little doubt that here was a massive peasant rebellion led by the upper village strata, the *khoṭs* and *muqaddams*. The rebellion, in spite of the brutal methods of suppression, simmered on; and Ibn Baṭṭūṭa found much of the country around Kol (Aligarh) in the hands of rural rebels as late as 1342.[2]

Baranī says that as a result of what happened in the Doab, notably 'the contraction of cultivation in the Doab, the ruin of its peasantry, the reduction in numbers of grain carriers, and the failure of grain to reach Delhi from the provinces of Hindustan, a serious famine began in Delhi and the entire Doab. Grain prices rose high. When the rains, too, failed, the famine became widespread, and continued for some years'.[3] It would seem that the famine began in 1334–5, and lasted for about seven years.[4]

Baranī, as we have seen, ascribes this calamity in its initial stages at least, to the heavy land tax. He here introduces us to a new relationship

[1] Baranī [140], 472–3, 479–80.

[2] Ibn Baṭṭūṭa [68], (text), 532–8, (trans.) 153–7.

[3] Baranī [140], 472.

[4] Baranī [140], 473, 480–6; Ibn Baṭṭūṭa [68], (text), 470, 489–90, and (trans.) 84, 104–5; Aḥmad [145], 106, 113. The date of the beginning of the famine is established by the fact that it began soon after Jalāluddīn Aḥsan Shāh declared himself independent in Ma'bar. This event happened in A.H. 735 (1334–5) to judge from the testimony of the coins. See: Prasad [451], 141–4.

in medieval economy: the relationship between land revenue and agricultural production. Heavy taxation, as Baranī realized, greatly affected agriculture; but, conversely, a decline in agriculture caused a corresponding fall in land revenue. It was therefore, an inevitable paradox that Muḥammad Tughluq, who provoked an agrarian rebellion of unprecedented intensity by increasing taxation, should be the very first ruler to formulate a systematic policy of promoting agriculture.

The sultan took the first steps while trying to grapple with the effects of the famine. He advanced *sondhār*, or loans to peasants, to enable them to extend cultivation and dig wells.[1] The Hindi term *sondhār* still survives in some localities;[2] but the word now in use to represent such loans made by the government to cultivators is 'taccavi', from *taqāvī* (literally, strength-giving), used in the Mughal administration for pre-harvest loans. In recorded history Muḥammad Tughluq is the first Indian ruler to have used this device to promote cultivation on a large scale.[3]

Subsequently, during the many years (until 1346–7) that the sultan remained at Delhi, he conceived of a grand design to extend and improve cultivation. In the words of the contemporary chronicler:

The first preoccupation of Sultan Muḥammad during the years that he did not leave Delhi was the laying down of regulations [*uslūb-hā*] for extending cultivation. Whatever crossed his mind for the good of extending cultivation he put down on paper. That was given the name of *uslūb*. If those *uslūbs* as conceived had really been put into effect and had not been deemed impossible of execution by the people, there would really have come about great plenty due to the extension and improvement of cultivation; large gains would have accrued to the treasury; and the army would have become so large that the whole Inhabited Quarter could have been conquered.

A *Dīwān* [Ministry] was established for extending cultivation; that *Dīwān* was known as the *Dīwān* of *Amīr-i Kohī*. Officers were appointed to take charge of territorial divisions approximately 30 *karohs* by 30 *karohs*[4] upon condition that one span of land would not remain uncultivated in a stretch of so many *karohs* and that whatever was being cultivated would be changed: thus wheat would be sown instead of barley; and sugarcane instead of wheat; and grape and date would be planted instead of sugarcane. Nearly 100 *shiqqdārs* were appointed in the territory under the project.

Greedy, impecunious men without hope of salvation, came forward: some persons pledged themselves to bring one lac of *bīghas* of wasteland [*akhal*] under cultivation; others promised to raise a thousand horsemen from (the revenues

[1] Baranī [140], *484*; Ibn Baṭṭūṭa [68] (text), 474, (trans.), 88–9.

[2] Elliot [291], II, 345.

[3] With taxation of the same magnitude in operation in earlier Islamic states, such advances were part of normal administration there. Niẓāmu'l Mulk Ṭūsī (d. 1092) enjoins the revenue collector (*'āmil*) to 'advance loan (*wām*) to such of the peasants, who are indigent or need cattle and seeds'. Ṭūsī [120], 29.

[4] A *karoh* was then probably equal to 1½ miles.

of) the wastelands – all within three years. They were given horses of tight girth, gold-embroidered gowns, waist-bands of brocade, and cash. They took away (from the Sultan's treasury) large sums, either by way of rewards or gifts, or in the form of *sondhār*; each taking 3 lacs of *ṭankas* or 50 thousand *ṭankas* in cash. They carried away these sums at the risk of their own lives, spending them for their own expenses and needs. When large areas of waste-land that had no capacity for sustaining cultivation remained uncultivated, they became fearful of punishment. Within a period of two years about 70 and odd lacs of *ṭankas* were given by way of *sondhār* to the crew who had pledged to bring wastelands under cultivation. But in a period of three years, neither a thousandth nor a hundredth part of the areas of wasteland was brought under cultivation as pledged. Had the Sultan come back alive from the expedition to Thatta [in 1351], not one of those who had given pledges and taken *sondhār* would have escaped alive.[1]

Shams Sirāj 'Afīf referring briefly to this enterprise gives a still higher figure (2 crores or 20 million *ṭankas*) for the money that the sultan gave 'by way of *sondhār*'. He agrees that none of the money was recovered by the treasury after Sultan Muḥammad's death, being entirely written off by his successor Fīrūz.[2]

Baranī portrays the undertaking as a complete failure. Even if it was – and there is no means of controverting Baranī on this point – the project embodied principles which became normal maxims under succeeding administrations. As with Muḥammad Tughluq, agricultural improvement was henceforth conceived of in two forms: (a) the extension of area under cultivation and (b) the extension of crops of high value at the expense of crops of lower value.[3] Either kind of improvement was bound to lead to an increase in land revenue. The main device for promoting improvement came to be the grant of advances made out of the government's own funds.[4] In other words, a part of the revenue realization of one year was set apart for securing future increase in revenue through short-term credit to peasants.

Fīrūz Tughluq (1351–88) not only abandoned the grand project of his predecessor, but sought to give some fiscal concessions. He abolished agrarian cesses (*muḥaddisāt*, *qismāt*) (Muḥammad Tughluq's *abwāb*?).[5] 'Afīf says that he limited exactions above the *kharāj* to 4 per cent.[6] He also forbade the levy of *gharī* and *charāī*.[7] Apparently referring

1 Baranī [140], 498–9.
2 'Afīf [143], 91–2. He says the advances had been made to resettle towns and villages devastated by the famine.
3 These were the twin objectives of 'agricultural development' in Mughal administration as well (Habib [343], 251).
4 For *taqāvī* loans under the Mughals, see: Habib [343], 253–5.
5 Baranī [140], 574.
6 'Afīf [143], 99, 'two *jītals* in one tanka'.
7 Firuz Shah's own claim [142], 5; Anonymous [141] ff. 60b–61a. In both these works *gharī* is spelt *garhī*. 'Afīf does not specify these two taxes, but says the remission of a number of taxes occurred in 1375–76 ('Afīf [143], 373–9).

to the latter, the chronicler says that previously the peasants were left barely able to have one cow each.[1] It is, however, possible that these prohibitions were accompanied by the levy of the *jiziya*, the Islamic poll tax on non-Muslims. Before this time the land tax was indifferently called *jiziya* or *kharāj-jiziya*; and it seems that no separate tax under the name of *jiziya* was levied in addition to the land tax.[2] But from Fīrūz Tughluq's time a document comes down to us, distinctly showing that the *jiziya* was now levied upon the peasantry as a separate tax.[3] It is interesting to consider whether *jiziya* here was simply replacing *gharī*. Since the women and minors were exempted from *jiziya*, it too was really a tax on (heads of) houses. Fīrūz also took a water tax (*ḥaqq-i shurb*) from villages served by canals. This amounted to a tenth of the produce.[4] The area where it was imposed was practically confined to Haryana.

Subsequent to Fīrūz, information about agrarian taxation becomes very scarce. It is very likely that the land tax continued to be taken from the peasants in full, although the claimant was no longer the sultan of Delhi, but either a provincial ruler or a local hereditary or semi-hereditary governor. A tradition recorded much later says that under the Lodi sultans of Delhi a shift took place from payment of revenue in cash to payment in kind in conditions of extremely low prices:

> Sultan Ibrāhīm [1517–26] ordered that all the nobles and commanders (*umarā o mulūk*) should collect in tax only foodgrains and whatever grew on the lands and not take any cash from peasants (*ri'āyā*). Unlimited quantities of grain were thus obtained from the *jāgīrs*; but for their expenses, the nobles and commanders needed cash. Out of necessity they sold foodgrains to anyone who took it at whatever rate. Divine wisdom so ordained that ten *mans* of grain went to one *Buhlūlī* [billon coin]. But gold and silver [money] became hard to find.[5]

It is possible that tradition here has reversed cause and effect. With a worldwide shortage of silver a continuous fall in prices had been taking place for a long time. The peasants must have found it a great hardship to sell enough in order to be able to pay revenue in cash. It was thus probably as a concession to them that the sultan decided to issue an order requiring all assignees to collect tax only in grain. With the beginning of the silver influx from the New World soon afterwards, prices could have tended to pick up. And this, removing the particular factor

[1] 'Afīf [143], 98–9.

[2] In Malik (ed.) [3], 232–3 (A.D. 1315), *kharāj*, *jiziya*, and tax on cultivation (*wajh-i kisht-hā*) are all used for the same tax. The anecdote is related of how a collector demanded of a Muslim mystic *jiziya* for the land he tilled. For *kharāj-jiziya* see: Baranī [140], 291, 231, where it is plainly used in lieu simply of *kharāj*.

[3] Māhrū [5], 61–3, where separate arguments are advanced for the collection of *jiziya* and *kharāj* from deserting peasants.

[4] 'Afīf [143], 129–30.

[5] 'Abdullāh [152], 104–5. The scarcity of money and cheapness of grain are also mentioned in *Zubdatu't Tawārīkh*, a slightly earlier work (Wright [549], 258).

inspiring tax collection in kind, enabled a quicker restoration of the cash nexus under Sher Shāh (1540–5) and Akbar.

IQṬĀ'S: DISTRIBUTION OF REVENUE RESOURCES AMONG THE RULING CLASS

As taxation came to appropriate a sizeable part of the peasant's surplus in countries of the Islamic world, a mechanism had simultaneously to be devised to collect this from the peasantry and distribute it among the members of the ruling class. The crucial element in this mechanism was the *iqṭā'*, through which were combined the two functions of collection and distribution but without immediately endangering the unity of the political structure. The *iqṭā'* was a territorial assignment and its holder was designated *muqṭi'*. A Saljūqid statesman of the eleventh century gives us a classical (and, partly ideal) view of the *iqṭā'* as it had developed until just before the Ghorian conquests of northern India.

Muqṭi's who hold *iqṭā's* should know that they have no claim on the subjects/peasants (*ri'āyā*) other than that of collecting from them in a proper manner the due *māl* [tax, land tax] that has been assigned to them [the *muqṭi's*]. When the revenue has been realised from them, those subjects/peasants should remain secure from [any demands by] them [the *muqṭi's*] in respect of their persons, wealth, wives and children, cultivated lands (*ẓiyā'*) and goods. The *muqṭi's* do not have any [further] claims on them. The subjects/peasants, if they so wish, can come to the [king's] Court and represent their condition. They should not be prevented from doing so. If any *muqṭi'* does anything other than this they [the kings] take away his power [literally, cut away his hands] and resume his *iqṭā'* and visit their wrath on him, so that others might be warned thereby. They [the *muqṭi's*] should in truth realise that the country and peasantry (*ra'iyat*), all belong to the Sultan, with the *muqṭi's* [simply] placed at their head.[1]

Niẓāmu'l Mulk here emphasizes an important element in the *iqṭā'*, viz. the *muqṭi's* right to collect and appropriate taxes, especially land revenue, due to the king, during the latter's pleasure. The *iqṭā'*, however, also implied, in return, certain obligations on the part of the *muqṭi'* to the sultan, the major one being to maintain troops and furnish them at call to the sultan. The revenues he appropriated from the *iqṭā'* were thus meant to provide him with resources wherewith to fulfil this obligation. Niẓāmu'l Mulk himself regards this way of maintaining the bulk of the sultan's troops as normal, though he records a tradition that earlier kings paid for their army in cash from the treasury, and 'did not assign *iqṭā's*'.[2] The *muqṭi'* was thus tax collector, and army paymaster

[1] Ṭūsī [120], 44. [2] Ṭūsī [120], 152–3.

(also commander), rolled into one. The area that the sultan did not give in *iqṭā'*s was called *khāliṣa*; here the sultan's officials (*'āmils*) collected taxes directly for the royal treasury.

When the Ghorians conquered northern India, the conquests were initially divided up among commanders who maintained themselves and their troops by plunder and collection of tribute. Yet, so familiar was the practice of *iqṭā'* assignments to the conquerors that the commanders were designated *muqṭi'*s, and their territorial jurisdictions were called *iqṭā'*s (also occasionally called, respectively, *wālīs* and *wilāyats*).[1]

With the establishment of the sultanate, conditions largely remained the same; but a gradual process seems to have begun that ultimately converted what were autonomous principalities into real *iqṭā'*s. First of all, the sultans from Iltutmish (1210–36) onwards enforced the practice of transferring *muqṭi'*s from one *iqṭā'* to another.[2] The *muqṭi'*s were clearly required to furnish military assistance at the summons of the sultan; but in the earlier period at least, there is no evidence that the *muqṭi'* was required to maintain a fixed number of troops or to send every year a particular amount to the sultan's treasury. The *muqṭi'* also seems to have been free to sub-assign small *iqṭā'*s to anyone he chose, from within his own larger *iqṭā'*;[3] he also probably normally paid his troops by this means.

The sultans sought to enlarge their own *khāliṣa*. In what is the first reference to *khāliṣa* in India, Iltutmish is said to have appointed a slave of his as the *shaḥna* of the *khaliṣāt* of Tabarhinda (Bhatinda).[4] Apparently Delhi itself together with its surrounding district, including parts of the Doab, was in the sultan's *khāliṣa*. A later tradition related that Iltutmish paid cavalry soldiers of his own 'central' army (*qalb*), 2,000 or 3,000 in number, by assigning them villages, which came to be called *iqṭā'*s (paralleling similar sub-assignments by *muqṭi'*s). The practice continued under Balban (1266–86), who, in spite of discovering great abuses, did not seek to abolish the assignments, but only to reduce or resume those from which full or proper service was not forthcoming.[5]

If Baranī has not read a later practice into the past, the sultans began to insist well before the fall of Balban's dynasty that 'excess amounts' (*fawāẓil*) must be sent from the *iqṭā'*s to the sultan's treasury.[6] One could say that inherent in the calculation of the excess was an estimation of

1 Sirāj [136], I, 398, 417, 422–3ff.
2 This emerges most clearly from the biographical sketches of a number of slave-officers of Iltutmish in: Sirāj [136](2), 3–89. Cf. Moreland [428], 217–9.
3 Tāju'ddīn Sanjar Qutlugh, *muqṭi'* of Badaun, assigned an *iqṭā'* for the maintenance of Minhāj Sirāj in 1242–3, when the latter had had to leave Delhi (Sirāj [136], II, 26).
4 Sirāj [136](2), 20.
5 Baranī [140], 61–4. The reading '2,000 or 3,000' instead of '2,000' for the number of cavalry troopers occurs in Professor E. R. Rashid's edn, Aligarh, 1957, I, p. 72.
6 Baranī [140], 163–4; also 220–1.

the tax income of the *iqṭāʿ* and the expenditure on the troops the *muqṭiʿs* were expected to maintain. Sultan Balban's appointment of a *khwāja* (accountant) along with the *muqṭiʿ*[1] suggests perhaps that the sultan's government was now trying to discover what was actually collected and spent within the *iqṭāʿ*.

Major changes occurred during the reign of ʿAlāʾuʾddīn Khaljī (1296–1316). Under this sultan there were simultaneously a great expansion in the limits of the empire and an attempt at imposing the full land tax on the peasantry of the older territories. This immense enlargement in resources of the ruling class was accompanied by a number of important measures affecting *iqṭāʿ* organization.

As more distant areas became subject to the empire and were assigned in *iqṭāʿ*, areas nearer the capital were annexed to the *khāliṣa*. It now covered the whole of the middle Doab and parts of modern Rohilkhand.[2] The system of paying the sultan's own cavalry troops (*ḥashm*) by assignment of villages as *iqṭāʿs* was abolished. The entire revenue of the *khāliṣa* was brought into the treasury, and the soldiers were paid in cash. This system continued without change until the end of the reign of Muḥammad Tughluq (1351).[3]

ʿAlāʾuʾddīn Khaljī maintained the practice of assigning *iqṭāʿs* to his commanders (*muqṭiʿs, wālīs*)[4] What was new was the extent of the intervention of the sultan's bureaucracy in the administration of the *iqṭāʿ*. ʿAlāʾuʾddin Khaljī decreed the new system of assessment and collection of agrarian taxes in a large region, the bulk of which, as Baranī himself shows, was under *muqṭiʿs*.[5] The new position of the *muqṭiʿ* in relation to the sultan's government is revealed in some detail by the chronicler when he describes the situation as it existed prior to the measures taken by Ghiyāṣuddīn Tughluq (1320–5).

The tax income (*kharāj*) from each *iqṭāʿ* was estimated at a particular figure by the Finance Department (*Dīwān-i Wizārat*). The department remained on constant look-out for an opportunity to enhance this estimate. Out of the estimated income of the *iqṭāʿ* a certain amount was allowed for the pay (*mawājib*) of the troops (*ḥasham*) placed under the *muqṭiʿ* or *wālī*. The area expected to yield this amount was apparently set apart by the *Dīwān*. The remainder was treated as the *muqṭiʿ*'s own personal *iqṭāʿ*, i.e. for his own salary and the expense of his personal establishment of officials. He had to pay into the treasury all realization above the amount allowed for the pay of the army and for his own income. The *muqṭiʿs* were naturally tempted to conceal their true

[1] Baranī [140], 36.
[2] Baranī [140], 323–4.
[3] Baranī [140], 303, 324; ʿUmarī [69] (trans. Siddiqi and Ahmad), Aligarh, 38; ʿAfif [143], 94–5.
[4] Baranī [140] gives names of holders of important *iqṭāʿs* on p. 323. Cf, however, Moreland [428], 39.
[5] Baranī [140], 288, 323.

receipts, and so understate the excess payable by them to the sultan. At the same time in order to maximize their collections, the *muqṭi'́s* were anxious to control the embezzlement by officials of their *iqṭā'́s* (*kārkunān o mutaṣarrifān-i wilāyāt o iqṭā'āt*). Thus while the sultan's government was intent on preventing concealment and defalcation by the *muqṭi'́s*, the latter harboured similar suspicions against their own subordinates. Harsh measures, including imprisonment and physical torture, were taken as part of audit at both levels.[1] Baranī says that 'Alā'u'ddīn Khaljī's minister Sharaf Qāi had the papers of the village accountants (*paṭwārīs*) audited in order to check fraud; revenue officials were kept by him for long years in chains and subjected to torture for small misappropriations.[2] 'Afīf alleges that the same minister imposed enhancements (*taufīr*) in the estimated income of the *iqṭā'́s*, as a result of which the entire sultanate was 'devastated'.[3] These enhancements might well have been based on detections made through his rigorous practices of audit.

Ghiyāṣuddīn Tughluq had no radical changes to introduce in this system, except to propound moderation. The Finance Department was not to increase the estimate of income by over one-tenth or one-eleventh annually, since the burden of any such enhancement could be passed on by the *muqṭi'* to the peasantry. No harshness was to be shown to *muqṭi'́s* who took anything from one-tenth to one-twentieth of the *kharāj* in excess of their sanctioned income. No *muqṭi'* was, however, to be allowed to take anything from the portion of the *iqṭā'* reserved for the payment of the troops. Similarly, the *muqṭi'́s* were warned not to ill-treat any of their officials for small amounts (0·5 or 1 per cent of the receipts), taken over and above their salaries.[4]

Under Muḥammad Tughluq (1325–51) we find a further extension of the control of the sultan's government. The two functions of collecting taxes and maintaining the troops now began to be separated. It is possible that the separation arose primarily out of a desire to obtain larger income. Baranī tells us of Niẓām Mā'īn, 'a man of low birth', who took the *iqṭā'* of Kara, on contract (*muqāṭa'a*) at some lakhs of *ṭankas* and of Nuṣrat Khān, a merchant, who took the contract for the *iqṭā'* of Bidar and surrounding territories, upon a promise to pay one crore of *ṭankas*.[5] 'Iṣāmī similarly recounts how 'Alīshāh Khaljī, having occupied Gobar, paid a fixed amount to the *Dīwān* every year. But then

[1] This paragraph is based on an interpretation of the passage in Baranī [140], 429–31. How a *muqṭi'* could imprison and threaten a clerk (*navīsanda*) who was a *mutaṣarrif* of a township within his jurisdiction, pending audit (*muḥāsiba*) is brought out in an anecdote related in: Nizami, ed. [4], 236–8.

[2] Baranī [140], 288–9, See also: Baranī [140], 556.

[3] 'Afīf [143], 478.

[4] Baranī [140], 429–31. I follow Moreland [428], 229, para. 38, in interpreting *panj-hazārī o dah hazārī* as meaning 5/1,000 and 10/1,000.

[5] Baranī [140], 487–8.

Sharan, a Hindu, who held the *iqṭā'* of Gulbarga, offered to pay half as much more and obtained charge of Gobar as well.[1] In the first two cases of contract (*muqāṭa'a*), recorded by Baranī, it is to be presumed that no obligation to maintain or furnish troops rested on the contractors, and the troops stationed in the *iqṭā's* must have had separate establishments. Ibn Baṭṭūṭa, in his account of the *hazār* of Amroha, tells us how in fact such dual administration operated.

The *hazār* of Amroha, he says, had a *wālī al-kharāj*, Arabic form for 'the *wālī* of the *kharāj* (revenue)'. He elsewhere calls him simply '*wālī*', the usual synonym of *muqṭi'*. The *wālī* ('Azīz Khammār) had 1,500 villages under his charge, yielding an (estimated) revenue of 6 million (*ṭankas*), whereof the *wālī* took just one-twentieth for his own pay, and the rest was paid into the treasury. It was out of this amount that 'Azīz Khammār was called upon to send large quantities of grain to Delhi. Side by side there was an *amīr* (military commander) of the same territory: he was in command of the troops, an advantage he drove home during a quarrel with 'Azīz, when he besieged the latter in his house with his troops. Presumably, the *amīr's* troops used to claim money for their pay from the *wālī*, for the *wālī* complained that a slave of the *amīr* had seized some money from his treasury.[2]

We are fortunate in possessing in the Arabic work, *Masālik al-Abṣār*, a description of the *iqṭā'* system as it functioned under Muḥammad Tughluq. It says that all army commanders, from *khāns* heading 10,000 cavalry troops to *isfāhlār* (*sipahsālārs*), placed over less than a hundred, were assigned *iqṭā's* in lieu of their salaries. The estimated income of the *iqṭā'*, against which the salary was adjusted, was always less than the actual. The significant point is that the troops are said to have been always paid in cash by the treasury and that the *iqṭā's* were given only in lieu of the commanders' personal salaries.[3] This would mean in effect that the apportionment of the *iqṭā'* reserved for the soldiery under the Khaljīs and Ghiyāṣu'ddīn Tughluq was now taken out of the commander's hands altogether; only the part sufficient to yield his own salary was left to him as his *iqṭā'*. It is easy to see that the kind of division witnessed by Ibn Baṭṭūta in the *hazār* of Amroha would then be true of all areas taken out of the old *iqṭā's*, and reserved for the payment of troops.

It is possible that Muḥammad Tughluq's difficulties with his army officers – called *amīrān-i ṣada* ('centurians') – had their roots in, among other things, the arrangements whereby the commanders were deprived of the gains of *iqṭā'* management. Baranī himself ascribes conflict with

1 'Iṣāmī [139], 484–5.
2 Ibn Baṭṭūṭa [68] (text) 525–7; (trans.) 144–6.
3 'Umarī [69] 36, trans., Siddiqi and Ahmad, 38–9. Cf. Moreland [428], 51–2.

the *amīrān-i sada* in the Deogir (Daulatabad) region to the new arrangements for revenue collection there.[1]

Fīrūz Tughluq's accession (1351) took place amidst a severe political crisis; and he began his reign by promising concessions to the nobility. He decreed that there should be a new estimate of the revenues (*maḥṣūl*) of the sultanate; and within four years this was prepared, the total amounting to 67,500,000 or 68,500,000 *tankas*. The figure was designated *jama'* (a term used for the first time); and no change was made in it for the remainder of the reign of the sultan.[2] The fixity of the *jama'* meant that the *muqṭi's* would not be troubled on account of enhancements in the payments due from them to the treasury. The auditing of their accounts at the court now became a comfortable and even pleasant business for the *muqṭi's*.[3] Fīrūz also increased the personal pay of his great nobles: whereas the highest personal pay of nobles under Muḥammad Tughluq was 200,000 *tankas* (for *khāns*),[4] Fīrūz gave to his *khāns* and *maliks*, for their personal income alone, the pay of 400,000, 600,000 or 800,000 *tankas*, reaching in the case of his vizier 1,300,000 *tankas*. In lieu of this they obtained separate '*iqṭā's* and *parganas*'.[5] It is to be assumed from 'Afīf's language that technically the portion of the *iqṭā'* assigned for the personal pay of the *muqṭi'* remained separate from that assigned for his troops; but in the absence of any mechanism of control the separation seems to have become increasingly nominal.

In general, Fīrūz Tughluq's policy was to assign away lands in *iqṭā's*; 'By an inspiration from God, he distributed the revenues (*maḥṣūl*) of the empire among the people; even (all) the *parganas* and *iqṭā's* were distributed.'[6] One should infer from this that the *khāliṣa* was greatly reduced. Within such of it as remained he re-established the system of paying soldiers by assigning them the revenues of villages as *wajh* (a new term) in lieu of their salaries (*mawājib*).[7] Soldiers who were not assigned *wajh*, were paid their salaries in cash from the treasury, or by way of drafts (*iṭlāq*, *barāt*) on the *iqṭā's* of the nobles, to be adjusted against the payments of 'excess' due from them to the treasury.[8] 'Afīf says that in such cases the soldiers received only half of their claim from the *iqṭā's*; and it was common for them to sell their drafts (*iṭlāq*) to

[1] Baranī [140], 500–1. For the 'rebelliousness' of the *amīrān-i ṣada* see also, Baranī [140], 503–4, 516–7.

[2] 'Afīf [143], 94, 296.

[3] Baranī [140], 555–6; 'Afīf [143], 341. For an incident late in the reign when an assignee of 2 *parganas* was asked to render accounts for the difference between the official estimate (*maḥṣūl*) and the actual realization (*ḥāṣil*) see: 'Afīf [143], 483–4.

[4] 'Umarī [69] (trans.) Siddiqi and Ahmad, 38.

[5] 'Afīf [143], 297.

[6] 'Afīf [143], 296–7: by 'people' here he means, of course, the nobility.

[7] Baranī [140], 553; 'Afīf [143], 94–6. Troops paid in this manner were known as *wajhdārs*; the others were known as *ghair-wajhīs* ('Afīf [143], 193–4, 220–1).

[8] Baranī [140], 553.

speculators for a third of the pay; the buyers of the paper then went to the *iqṭā'ṣ* where they apparently received only half of the amount due.[1]

The reign of Fīrūz Tughluq was also remarkable for the regard paid to the hereditary principle. Ever since the Khaljī *coup* of 1290, the ruling class of the sultanate had been marked by an acute instability in composition, a phenomenon tending, in the opinion of Baranī, to open its doors to plebeian elements of all kinds.[2] Fīrūz claims that he conferred offices of deceased incumbents upon their sons.[3] 'Afīf refers to this policy both in general terms and with reference to particular appointments.[4] The inference seems natural that in such cases the same territories continued in the *iqṭā's* of the incumbents and their sons. This is indeed explicitly recorded for the *wajh* assignments, which, upon the death of the troopers, passed on to their sons, and failing them, to sons-in-law, slaves, and widows.[5]

No restoration of central control of earlier times was possible under the successors of Fīrūz. We read that Mubārak Shāh (1421–34) in 1422 gave the *iqṭā'* of Lahore to a noble with 2,000 cavalry placed under him.[6] Here, then, the *iqṭā'* still carried some obligation to maintain troops. Cases of transfer of *iqṭā's* also occurred.[7] But these appear to have been exceptions. The following represents, perhaps, the more common situation:

> Sayyid Salīm [died, 1430] had been in the service of the late Khiẓr Khān [1414–21] for thirty years, holding many *parganas* and *iqṭā's* in the Middle Doab, besides the fort of Tabarhinda. His Majesty [Mubārak Shāh] had in addition given him the khiṭṭa [district] of Sarsuti and the *iqṭā'* of Amroha... After the Sayyid's death, his *iqṭā's* and *parganas* were conferred upon his sons.[8]

Under the Lodīs (1451–1526), the system remained essentially similar, but a reorganization occurred. The term *iqṭā'* now disappears from view, replaced simply by *sarkārs* and *parganas*.[9] These were territorial divisions, each *sarkār* comprising a number of *parganas*. The term *sarkār* seems to have originated from its use to represent a noble's 'establishment'. A group of *parganas* placed under the *sarkār* of a noble (and thus in older terminology, his *iqṭā'*) would be called, first, his *sarkār*, and, then simply, a *sarkār*. Each *sarkār* was assigned a *jama'*, or estimated revenue, whose purpose could only be to lay down, to some extent, the military and other obligations of the noble holding the *sarkār*-assignment.[10]

[1] 'Afīf [143], 296–7, gives the designation of *wajhdār* also to soldiers receiving pay by *iṭlāq*.
[2] Baranī [140], 178–9, 250–1, 336–8, 504–6.
[3] *Futūḥāt-i Fīrūzshāhī* [142], 18.
[4] 'Afīf [143], 474–5, 482.
[5] 'Afīf [143], 96.
[6] Sīhrindī [145], 197.
[7] E.g. the *iqṭā'* of Bayāna in 1427 (Aḥmad [145], 206).
[8] Sīhrindī [145], 214.
[9] Cf. Siddiqi [503], 26–31.
[10] Bābur [168] gives a list of *sarkārs* of the Lodī empire together with the *jama'* of each in *tankas* (Turkish text, ed. Beveridge), ff. 292a–293a; trans. Beveridge, II, 52.

Sikandar Lodī (1489–1517) was reputed to have refused to claim the balance if an assignee's income increased beyond the officially sanctioned figure.[1] The principal assignees used to sub-assign portions of their territories, or *parganas*, to their subordinates who, again, paid their soldiers by the same means.[2] In spite of the weaknesses of central control in the Lodi régime, the essential elements of the old *iqṭā'* *s* would appear to have been retained and to have been bequeathed to the Mughals who constructed on their basis their elaborate system of *jāgīrs*.

GRANTS

The *iqṭā'* *s* were the main instrument for transferring agrarian surplus to the ruling class and its soldiery. Another form of transfer of revenue claims existed, which went largely to maintain the religious intelligentsia and other dependants of the ruling class. The terms used for these grants were *milk* (plural, *amlāk*), *idrār*, and *in'ām*, which seem in actual use to have been practically interchangeable.[3] They represented grants of revenues of villages or lands to the grantees for lifetime or in perpetuity. Grants assigned to or for the maintenance of religious institutions, like madrasas, mosques, mystic establishments (*khānqāhs*), tombs, etc. were called *waqf* (plural *auqāf*).[4]

The sultan conferred the grant normally by issuing a *farmān*.[5] On the basis of this paper document, lands would be made over to the grantees, not only within the *khāliṣa* but also within the *iqṭā'* *s*, depending upon the location specified by the *farmān*. 'Ainu'l Mulk in one of his letters deals with *idrār* grants conferred by the king in Multan. The grantees were given both cultivated and uncultivated lands; this was much to their chagrin since they wanted only cultivated lands. However, as 'Ainu'l Mulk pointed out, surrender of cultivated lands to provide for new grants would have greatly reduced the *muqṭi'*'s own revenues.[6]

The grants were not normally transferable or resumable, but the sultan had always a right to cancel them. 'Alā'u'ddīn Khaljī (1296–1316) directed his officials 'to resume to the *Khālisa*, by one stroke of the pen, all villages held by anyone in *milk*, *in'ām*, or *waqf*'.[7] Ghiyāṣu'ddīn Tughluq (1320–5) similarly looked into the grants of his predecessors,

[1] Mushtāqī [147], f. 26a.

[2] See: 'Abbās Sarwānī's account of the arrangements in the *parganas* of Miān Ḥasan, the father of Sher Shāh (Sarwānī [148], ff. 6b, 10b–11a). 'Abbās uses the term *jāigīr* for territorial assignment, although this was not in use under the Lodīs.

[3] For such use see: Baranī [140], 283, 388–9; Faẓlallāh [2], 166–7; Nizami, ed. [4], 203; Māhrū [5], 79 ff.

[4] *Futūḥāt-i Fīrūzshāhī* [142], 15. See: Māhrū [5], 37–9, for *auqāf* in the region of Multan.

[5] Nizami, ed. [4], 203, for the anxiety of an *idrār*-holder whose *farmān* had been lost by fire and who then also lost the new *farmān*.

[6] Māhrū [5], 73–80.

[7] Baranī [140], 283.

and resumed large numbers of them.[1] It was left to Fīrūz Tughluq (1351–87) to take the extreme step of returning all those 'old *amlāk* villages and lands', which had been resumed in the past, to all claimants who could bring lawful proof of having previously held grants.[2] 'Ainu'l Mulk, indeed, claims that under this sultan the grants conferred in the Multan region were ten times those held in the time of 'Alā'u'ddīn Khaljī.[3]

It is possible to form some judgement of the extent of lands held in the grants by certain statements made by 'Afīf. He says that under Sultan Fīrūz lands yielding 36 lacs of *tankas* in revenue were held as *idrār*.[4] Since the total revenues of the sultanate, according to the same author, was estimated officially at 67,5000,000 *tankas*, the *idrār* grants represented an alienation of about 5.33 per cent of the total revenues.

It is also to be borne in mind that this only refers to grants conferred by the sultans. The *muqṭi's* and nobles, too, made similar grants out of their *iqṭā's*. Balban, when still a noble (1246–7), granted a village yielding 30,000 *jītals* to the historian Minhāj Sirāj:[5] another *malik* in 'Alā'u'ddīn Khaljī's time offered to make a grant (*tamlīk*) of gardens and cultivated lands to Shaikh Niẓāmu'ddīn, the Chishtī saint.[6] It is not certain whether such grants survived the transfers of the *iqṭā's* from the hands of the grantors.

The economic significance of the grants was limited, since the area covered by them was not large. Their ideological significance was perhaps greater. The entire Muslim theological class – the so-called *a'imma* – were largely maintained by these grants, so much so that '*a'imma*' tended to become just another term for 'revenue grantees'.[7]

3. Non-agricultural production and urban economy

NON-AGRICULTURAL PRODUCTION

The Delhi sultanate lacks any description of its economic resources of the kind that Abū'l Faẓl supplies for the Mughal empire in his *Ā'īn-i Akbarī*. Only a very incomplete sketch can, therefore, be offered of its mineral and craft production.

1 'Isāmī [139], 389–91; Baranī [140], 338–9. 'Isāmī violently protests against these resumptions: His own family was adversely affected. Baranī describes the measure with approval.

2 *Futūḥāt-i Firūzshāhī* [142], 16.

3 Māhrū [5], 79.

4 'Afīf [143], 359–60.

5 Sirāj [136], II, 61.

6 Malik, ed. [3], 170–1.

7 As in 'Iṣāmī [139], 390. This use of the term continued in the sixteenth century. In the seventeenth century it came to mean the land of the grant itself, the grantees being often called *a'immadārs*, holders of *a'imma*.

Of salt, the cheapest mineral, the Sāmbhar lake formed a major source in northern India, so much so that the word *namak* (salt) was joined to its name.[1] Quite surprisingly, in spite of the Salt range ('Koh-i Jūd') being frequently mentioned in our authorities, there is no description of the mines until Abū'l Faẓl offers one *c.* 1595. Since, however, the mines are mentioned by Yuan Chwang,[2] it is quite likely that they continued to be worked during the time of the sultans.

Among the metals, iron ore of an exceptionally high grade was mined in India and was used to produce damascened steel which had a worldwide reputation.[3] The mining areas lay scattered in the hilly region beginning with Gwalior and extending to the tip of southern India. The Cutch iron was probably responsible for the fame of the swords of Korij;[4] and the Geniza records of the eleventh and twelfth centuries show that the Deccan exported iron and steel to the Middle East.[5] But other mining localities can only be identified on the basis of the *A'īn-i Akbarī* and our seventeenth-century sources. One may suppose that they were largely the same. Similarly, the Rajasthan mines probably yielded copper in the period of the sultanate, just as they did under the Mughals.

Indian production of the two precious metals, gold and silver, was on a very limited scale. The accessible seams in the goldmines of Karnāṭaka appear to have been long exhausted. Only little quantities of gold could have come from the sands brought down by the Himalayan rivers. Of silver, no important mine seems to have been worked. As a result, India was almost entirely dependent upon imports for its gold and silver supply. Indeed, to outsiders it looked as if India went on absorbing limitless quantities of imported gold and silver, without disgorging any by way of exports.[6]

Among precious stones, diamonds were mined in the Deccan.[7] In the fifteenth century, they were also mined in Gondwana;[8] but of other mines mentioned in the *Ā'īn-i Akbarī*, e.g. the Kalinjar fields, we have no earlier notice. The pearl fishery off Tuticorin in south India is described by Marco Polo.[9]

Coming from mines to crafts, the greatest industry was, naturally, that of textiles. It has been suggested that there was an important improvement in cotton production technology through the introduction of the spinning-wheel.[10] It was Lynn White who first queried the

[1] Sirāj [136], II, 7–8.
[2] Hiuen Tsiang [57] (ed. Watters), II, 252–3.
[3] 'Umarī [69] (trans. Siddiqi and Ahmad), 27.
[4] Fakhr-i Mudabbir [121], 259.
[5] Goitein [318], 339.
[6] 'Waṣṣāf' [138], 300; 'Umarī [69] (trans.), 61.
[7] Polo [75] (3), 255–6.
[8] *Ma'āsir-i Mahmūd-shāhī*, 44 (Ratanpur and Raipur), 107 (Bairagarh).
[9] Polo [75] (3), 246–7. Cf. Frederick in Purchas [90] (2), 105–6.
[10] Habib [348], 140–3.

presence of this important device in ancient India.[1] The earliest reference to it so far traced in India occurs in 1350, in the verses of the historian 'Iṣāmī who, referring to the woman-sultan, Raẓiya (1236–40), says:

That woman [alone] is good who works all the time with the *charkha* [(spinning) wheel]; for a seat of honour would deprive her of her reason.

Let cotton [*panba*] be the woman's companion; grief her wine-cup; and the twang of the spindle [*dūk*] will serve well for her minstrel.[2]

In Iran, the presence of the instrument is attested to earlier still by the verses of the twelfth-century poets Anwarī and Niẓāmī.[3] The inference is, therefore, almost inescapable that the spinning-wheel came to India with the Muslims, and became presumably generalized by the mid-fourteenth century. The wheel in its simplest form increases the spinner's efficiency some six-fold in comparison with the spinner working with a hand-spindle.[4]

If two eleventh- and twelfth-century lexicons while mentioning *pinjana* really refer to the cotton-carder's bow,[5] this important instrument must have reached India just on the eve of the Ghorian conquests, for no earlier reference to it has been traced. In the Islamic world its presence in the eleventh century is firmly established by some verses of the Persian poet Asīr'uddīn Akhsīkatī;[6] and it had reached Europe by the fourteenth century. It has been urged, therefore, that this instrument, too, came to India with the Muslims.[7] The bow greatly enhances the quantity of cotton cleaned in comparison with the earlier and simpler method of beating raw cotton with a stick. Coming into use at about the same time, the spinning-wheel and the carding-bow must have dramatically cheapened spun yarn, and probably greatly enlarged its production.

Little is known about the weaver's loom (*kārgāh*). The enumeration of a few of its parts in Sanskrit lexicons[8] is not sufficient to indicate definitely whether the twelfth-century indigenous loom was different in any particular from the horizontal wooden loom depicted in Mughal miniatures, some 600 years later.[9] One cannot accordingly be sure whether any improvements were incorporated during the intervening

[1] White [545], 517.

[2] 'Iṣāmī [139], 134.

[3] Quotations in *Lughat-nāma* of Dihkhudā, ed. Muḥammad Mu'īn, fasc. 50, Teheran, 1338, 162–3.

[4] Forbes [302], IV (1956), 156.

[5] Chandra [256], 24. The dictionaries that Chandra cites are the *Vaijayantī* and the *Abhidhānachintāmaṇi*.

[6] Quotation in Bahār's dictionary [183] s.v. *Panba-zadan*: 'Every day, for beating the cotton (clouds) on the floor of the sky, Morning makes a *mushta* (hand-held tool) of the dawn's beam and a bow string (*kamān*) of the horizon.'

[7] Habib [348], 145–6.

[8] Chandra [256], 24–5.

[9] For example, [193], no. 66.

period, though the possibility cannot be excluded that treadles are an early medieval addition to the loom.[1] It is an interesting thought that, if there was no major improvement in weaving technology, while carding and spinning became much more efficient, the number of weavers should have increased proportionately to cope with the larger quantities of yarn now produced. It is likely, too, that there was an increase in cloth available per capita, which might explain the improvement in the clothing of the ordinary people when one compares the depictions in Ajanta and early medieval sculpture with those in Mughal miniatures.[2]

Of the kinds of cloth manufactured we have little information beyond names.[3] A coarser (*kamīna*) kind of cotton cloth worn by 'the poor and the dervishes' was called *pat*. Delhi drew supplies of this from as far as Awadh (Ayodhya), though a merchant bringing it was advised to trade in finer (*mahīn*) cloth, worn by 'the Turks and soldiers'.[4] A little superior to this variety was calico (*kirpās*); the price of the fine (*bārīk*) could be double that of the coarse (*kamīna*).[5] Then there were varieties of muslin, from *shīrīnbāft* and *salāhatī* (Sylhet muslin) to *Bhairon* and *Devgīrī* (from Devagiri). The last two varieties were so fine and expensive that they were only worn by the nobles and the very rich.[6] Besides Devagiri, Bengal was a major exporter of muslin. Ma Huan (1432) describes a number of fine varieties of cloth, but the indigenous names, beyond *shānabāf* and *chautār*, are hard to restore.[7] Gujarat similarly produced considerable amounts of fine cotton-stuffs.[8]

There was much weaving of silk as in the *Juz* cloth woven at Delhi and Koila, and of cotton and silk mixed, as in *Mashrū'*.[9] Raw silk (*abresham*) was thus a profitable item of import from Iran and Afghanistan.[10] Silk-weaving was taken to its finest level in Gujarat, the home of the incredible *paṭola* device, where the warp and weft threads are so dyed that upon weaving they reproduce the most complex designs. So highly valued were the *paṭola* fabrics that the historian especially mentions them among 'Alā'u'ddīn Khaljī's enormous spoils

1 Cf. L. White [545a], 117, 173.
2 Habib [348], 147–8.
3 Chandra has assembled the available information in his art [257], 5–61.
4 Nizami, ed. [4], 183. A Baranī MS. [140] consulted by Digby, puts *bat* (rect., *pat*), as the cheapest cotton cloth in 'Alā'u'ddīn Khaljī's cloth-market at Delhi.
5 Baranī [140], 310. For *kirpās*, see also Nizami [4], 136.
6 Baranī [140], 310, 311. Ibn Baṭṭūṭa [68] (text), 531, (trans.), 151 praises *Bairamiya* (*Bhairon*) as a fine cotton cloth. But subsequently *Bhairon* was applied to an inferior variety (*Hobson-Jobson*, s.v. 'Bairamee'); and, to judge from its price in Abū'l Fazl [123], a similar fate overtook *Salāhatī*.
7 Ma Huan [59], 162–3.
8 Polo [75] (3), 262–3.
9 Baranī [140], 310. Cf. Khusrau [137], 22; Ibn Baṭṭūṭa [68] (text), 531, (trans.), 151. The translator wrongly reads *khazz*.
10 Before coming to India, Minhāj Sirāj prudently went to Farah to purchase silk [136], (II, 184).

from Deogir.[1] Gujarat had a great reputation also for its gold and silver embroidery.[2] The shawl industry of Kashmir had been equally firmly established much before the thirteenth century;[3] and Muḥammad Tughluq sent Kashmir shawls as presents to the Chinese emperor.[4] It is likely that woollen manufacture, especially carpet-weaving, derived considerable impetus from patronage of the sultanate ruling class, whose tastes were greatly influenced by the fashions of Iran and central Asia.

One wishes our evidence could tell us about the state of traditional dyeing techniques as tie-and-dye (already mentioned by Bāṇa in the seventh century)[5] and the resist-and-mordant dyeing in use in India during our period. Nor is there really definite information about calico-printing before the sixteenth century. Moti Chandra cites Dhanapāla and Hemachandra (tenth and eleventh centuries) for references to cloth-printing.[6] Much depends on the connotation of the terms *chhimpa* or *chappa*. Hemachandra himself uses *chhapanti* for a process whereby a lotus pattern was 'drawn'; and this suggests the painted, rather than printed, 'chintz'. Similarly, *chitrapat* is quite possibly the Sanskrit form of *chhīnt* or chintz, and does not necessarily mean printed cloth.[7] No reference to cloth-printing has so far turned up in the Persian sources of the sultanate period. Much uncertainty, therefore, surrounds the time when the process actually became common in India.

The textile industry displayed the most varied forms of labour organization. The cotton-carder (*naddāf*) was probably one who hawked or hired out his services.[8] Spinning was done by women (including women slaves) at home.[9] Weavers, too, usually worked at home, on their looms (*kārgāh*), weaving cloth (out of cotton purchased by themselves) for sale.[10] They also accepted wages to weave yarn supplied to them by customers.[11] Where the materials were expensive (e.g. silk, gold or silver wire) and the products were luxury garments, the work was done in *kārkhānas*. In Muḥammad Tughluq's *kārkhānas* at Delhi, there were 'four thousand silk workers who weave and embroider different kinds

[1] Baranī [140], 223. Cf. also Chandra [256], 20. Among the presents 'Alauddin sent to the Il Khānid minister Rashīdu'ddīn was *Abrad-i Kambāyatī*, the striped silk cloth of Cambay (Fazlallāh [2], 282).

[2] Polo [75] (3), 263.

[3] Cf. Chandra [256], 7, 8.

[4] Ibn Baṭṭūṭa [68] (text), 531, (trans.), 151. The text has only *mir'iz*, wool from goat's underbelly; and Kashmir is not mentioned.

[5] Cf. Chandra [257], 62–3.

[6] Chandra [257], 23. In another article [257], 17, he takes *chhimpika* to mean female calico printer and infers that 'calico-printing' was practised in Gujarat in the fourteenth century.

[7] Chandra [256], 27.

[8] Shaikh Niẓāmu'ddīn's mother bought raw cotton (*maḥlūj*), and then gave it to a carder (*naddāf*) to be cleaned Nizami, ed. [4], 191. For a *naddāf's* wages, see: Nizami, ed. [4], 240.

[9] Nizami, ed. [4], 138, 191; 'Iṣāmī [139], 134.

[10] Malik [3], 431–2. A ṣūfī-weaver could hardly have given over to the thief 7 *gaz* of cloth taken off his loom, if it had belonged to a customer.

[11] Nizami, ed. [4], 191.

of cloth for robes of honour and garments'.[1] Of Fīrūz Tughluq's *kārkhāna* manufacturing cloth (*jāmadārkhāna*), it is said that every winter alone it met orders for 600,000 *ṭankas*-worth of cloth. The carpet-weaving establishment (*farrāsh-khāna*) fulfilled orders worth 200,000 *ṭankas* per year.[2]

A second major sector of urban employment was the building industry. The arrival of the 'Saracenic' architecture represented something more than a change in the appearance and design of buildings. With lime mortar as the cementing material and the true arch, dome and vault providing new devices for roofing, there was in the fourteenth century a remarkable spurt in brick construction in the towns. The ruins at Delhi speak for themselves. If the towns still largely consisted of mud-walled thatch-roofed huts of the poor, the rich and the middle strata probably took wholly to living in brick or stone-and-brick houses. The forts, palaces, mosques and other public buildings were also built on a large scale. The historian Baranī asserts that Sultan 'Alā'u'ddīn Khaljī employed as many as 70,000 craftsmen for the construction of his buildings.[3] Large numbers must have been kept employed under Muḥammad Tughluq and Fīrūz Tughluq who, too, were great builders. When Bābur (1526–30) established his dominion in India, he was able to employ nearly 1,500 stonecutters daily on his own buildings;[4] the numbers of masons and ordinary labourers is not recorded.

Indian metallurgy enjoyed a worldwide reputation in the fashioning of swords. Fakhr-i Mudabbir thought the Indian swords to be the best, and writes that the damascened sword (*maujdaryā*) was the rarest and fetched the highest price. Another kind was made of soft iron alloyed with copper and silver, and still another, from Kurij in Cutch, was made of steel.[5] The Geniza records show that the Deccan bronze and brass industry induced imports of copper and lead into India; vessels and utensils were even fashioned for customers in Aden, who sent broken pieces to India to be remade.[6] Finally, the high quality of the sultanate coinage during the thirteenth century, discussed in a separate section (pp. 93–101), also testifies to the metallurgical attainments of the minters.

One new industry which the new régime brought to India was paper manufacture. Paper was first manufactured in China around A.D. 100, but its manufacture spread westwards with the slowest speed, reaching Samarkand and Baghdad in the eighth century, and Germany only in the fourteenth.[7] Knowledge or even use of paper could long precede

[1] 'Umari [69] (trans. Siddiqi and Ahmad), 39.
[2] 'Afīf [143], 337–9.
[3] Baranī [140], 341.
[4] Bābur [168], II, 520.
[5] Fakhr-i Mudabbir [121], 258–60.
[6] Goitein [318], 340.
[7] Usher [536], 239.

its indigenous manufacture; but there is nothing to show that paper was used in India before the thirteenth century. The earliest surviving paper manuscript in India was written in Gujarat, in 1223–4.[1] An anecdote related of Balban's court (1266–86) implies that paper was not torn, upon its contents being cancelled, but was washed, apparently to be ready for use again.[2] The anecdote occurs in a mid-fourteenth century work; but at least by that time the scarcity of paper must have eased somewhat, for we have another anecdote in another work of the time showing that sweetmeat-sellers of Delhi used written paper as packing material.[3] Paper greatly facilitated and cheapened the circulation of books, bringing into being a class of professional transcribers (*nassākhs*). But getting a copy made of any book, which meant buying paper and hiring a *nassākh*, remained a difficult and expensive undertaking for scholars.[4]

COMMERCE

The economy of the Delhi sultanate seems to be marked by a considerable expansion of the money economy, accelerating particularly during the first half of the fourteenth century. The numismatic evidence, examined in a separate section, suggests a considerable increase in coined money. As we have already seen (pp. 61–2), the peasant parted with his surplus in the form of the land tax by making payments in cash, rather than in kind, in a constantly expanding area. A city of the size of Delhi could not have been sustained except by commerce and money transactions on a large scale. Ibn Baṭṭūṭa, who was in a real position to judge, writes that Delhi was enormous in size, large in extent and great in population, the largest city in not only India, but the entire Islamic East.[5] Yet he says that Daulatābād (Devagiri) rivalled Delhi in size.[6] Beside these two great cities there were others like Lahore, Multan, Anhilwara (Patan), Cambay, Kara and Lakhnauti, which are mentioned in our sources without any indication of their size. Undoubtedly, the fortunes of some cities fluctuated: Lahore was reduced to ruins by the Mongols in 1241, and it remained in a desolate condition until well into the fourteenth century.[7] It is asserted in the case of Multan that it had decayed previously but revived during the reign of Fīrūz Tughluq.[8] On the whole, however, the sultanate presents the spectacle of a flourishing urban economy. Such an economy must have necessitated commerce on a large scale.

[1] Sircar [513], 67 and note.
[2] Baranī [140], 64.
[3] Nizami [4], 203.
[4] Anecdote in: Malik, ed. [3], 45–6.
[5] Ibn Baṭṭūṭa [68] (text), 414–5, (trans.) 24–5.
[6] Ibn Baṭṭūṭa [68] (text), 547, (trans.) 168–9.
[7] Sirāj [136], I, 465–6, II, 163–66. Cf. Malik, ed. [3], 124–5.
[8] Māhrū [5], 39.

The towns needed to be fed and supplied with raw materials from the countryside. The high level of agrarian taxation and the cash-nexus in combination ensured that the peasants would have to sell much of their produce in order to pay the land revenue. Baranī tells us how the high pitch of demand under 'Alā'u'ddīn Khaljī (1296–1316) forced the peasants of the Doab to sell grain 'by the side of their fields' to the *kāravānīs* who took it to Delhi for sale.[1] Baranī describes the *kāravānīs* (a Persian term literally meaning 'those who moved in large numbers together') as merchants who specialized in transporting grain.[2] In the same context, the contemporary mystic Naṣīru'ddīn refers to them as '*nāyaks*', 'who bring foodgrains from different parts to the city, some with ten thousand (laden) bullocks, some with twenty thousand'.[3] This also tells us that grain was not transported on bullock carts, but on the backs of the bullocks. Ibn Baṭṭūṭa mentions 30,000 *mans* of grain being transported from Amroha to Delhi on the backs of 3,000 bullocks; he adds that this was the usual mode of transport for goods in bulk.[4] The system was thus identical with the one in vogue during the Mughal times; except that the transporters had by then come to be called *banjāras*.[5] A very important lever in Alā'u'ddīn Khaljī's price-control mechanism was the brisk commerce in grain that he was able to ensure by a combination of the stick and carrot. According to Baranī he compelled the *kāravānīs* to bring grain continuously by holding hostage their families, cattle and goods, and subjecting their headmen to the threat of imprisonment.[6] Naṣīru'ddīn, on the other hand, says that 'Alā'u'ddīn summoned the *nāyaks* and, conferring robes on them, gave them money from the treasury (as loans presumably) as well as expenses for their families, to ensure adequate supplies of grain to the city.[7] What is remarkable is that there should have been sufficient resources at the command of the grain merchants for the system to prove workable at least during the lifetime of the sultan.

The towns had probably little to send back to the villages in exchange; they did not also need to, since the taxation system assured all the time a heavy 'balance of payments' in favour of the towns, which were the headquarters of the sultan and members of the ruling class.

The sultanate created certain conditions which favoured the growth of commerce. Highways ran through the empire marked by minarets spaced at set distances,[8] and inns at four 'bow shots' (*manzils*)[9]. In Bengal Ghiyāṣu'ddīn 'Iwaẓ Khaljī built long embankments to carry roads

[1] Baranī [140], 307.
[2] Baranī [140], 306.
[3] Nizami, ed. [4], 241.
[4] Ibn Baṭṭūṭa [68] (text), 526–7, (trans.) 146. Cf. 'Umarī [69] (trans.), 35.
[5] Cf. Habib [343].
[6] Baranī [140], 206.
[7] Nizami, ed. [4], 241.
[8] Ibn Baṭṭūṭa [68] (text), 546, (trans.) 167.
[9] 'Umarī [69] (trans.), 58.

invulnerable to flood.[1] On long-distance journeys, prosperous travellers rode horses, while the impecunious walked; bullock-carts too, carried passengers, presumably on payment.[2] The government had its own rapid system of communication (*barīd*) by relay runners as well as horses.[3] But there also existed private 'postal' arrangements: apparently, letters sent from one place to another were announced by crying out the names of the addressees in the market-place.[4]

The volume of traffice that these routes carried cannot of course be determined. The limits within which commerce could take place were naturally narrower in the case of goods of bulk, but more extensive for goods with higher cost: weight ratios.

Our information about the commodities that entered long-distance trade is sketchy and incomplete. Over land, horses formed the chief item of import and slaves, the chief item of export, with Multan as the great *entrepôt*.[5] Silk was a profitable item of import,[6] while indigo, which Iran imported from India, must have been sent out by this route.[7] Multan itself drew supplies for its own consumption from quite distant towns in India: candied sugar from Delhi and Lahore; and *ghī* from Sarsuti (Sirsa).[8]

Most of the goods imported at and exported from Multan were either re-exported to, or received from, Delhi. Thus certain merchants from Khurasan, hoping to trade horses for slaves, petitioned that the duty payable at Multan be taken from them at Delhi, where they would sell their goods.[9] Delhi, after all, had a very large horse-market, and a considerable slave-market.[10] The capital itself obtained foodgrains from as far as Amroha;[11] wines from Kol (Aligarh) and Meerut;[12] betel leaf from Dhār in Malwa, some twenty-four days' journey away;[13] ordinary cloth from Awadh (Ayodhya);[14] muslin from Devagiri;[15] striped cloth (*bard*) from Lakhnauti (Bengal);[16] and brocade from as far as Tabriz in Iran.[17]

The commerce in horses extended to Bengal. When Muḥammad

[1] Sirāj [136], I, 436–7.
[2] See, for example, the anecdote in: Malik, ed. [3], 372 of a man travelling from Delhi to Ajodhan. Cf. 'Afīf [143], 135–6.
[3] Ibn Baṭṭūṭa [68] (text), 394–5, (trans.) 3–4. Cf. 'Umarī [69], (trans.), 57–8.
[4] Nizami [4], 184.
[5] Māhrū [5], 212–3. For export of slaves, see Sirāj [136], I, 483–4, II, 61. Cf. Malik, ed. [3], 192–3.
[6] Sirāj [136], II, 184.
[7] Boyle [251], 502.
[8] Māhrū [5], 71–2.
[9] Māhrū [5], 212–3.
[10] Baranī [140], 313–4.
[11] Ibn Baṭṭūṭa [68] (text), 526, (trans.), 146.
[12] Baranī [140], 156.
[13] Ibn Baṭṭūṭa [68] (text), 546. The translator (trans., 167) erroneously inserts the name Chanderi.
[14] Nizami, ed. [4], 183.
[15] Baranī [140], 311.
[16] Sale of this cloth at Delhi is recorded in Baranī's earlier version of 'Alā'u'ddīn Khaljī's price control measures (text kindly supplied by Simon Digby).
[17] Baranī [140], 311.

Bakhtiyār Khaljī appeared at Nadiya, capital of Bengal, with a few cavalry, people mistook his retinue for merchants bringing horses for sale.[1] Bengal also imported horses from the Himalayas; and Simon Digby has suggested that these were not the Himalayan ponies, but a superior breed from south-west China.[2] In return, Bengal must have exported its fine muslin and, perhaps, later on, silk.

For the commerce of Gujarat and the Deccan, the reader is referred to the chapter on maritime trade (chapter V).

The large inland commerce was handled by a large and heterogeneous community of merchants. Pious men came from central Asia to Delhi to turn a profit for themselves out of trade.[3] A *ṣūfī* from Bihar might become a slave-merchant, trading profitably between Delhi and Ghaznin.[4] Conversely, a great merchant (*malikut tajjār*) of Multan, Ḥamīdu'ddīn, 'who from his grandfather and father had learnt nothing but the taking of interest', was made the chief *qāẓī* by 'Alā'u'ddīn Khaljī.[5] Though much reviled by the historian Baranī on account of his mercantile antecedents, this personage was apparently respected in some Ṣūfī circles.[6]

Baranī suggests that a large amount of long-distance trade was in the hands of persons called Multānīs, or people belonging to Multan. Since Ḥamīdu'ddīn is called *Multānī-bachcha*,[7] it is possible that some of the Multānīs were Muslims; but Baranī refers to them in conjunction with *Sāhs* which, in that context, suggests that the Multānīs were Hindus, who were professionally engaged in usury and commerce (*sūd o saudā*).[8] This accords with the definition furnished for 'Multānī' in a later lexicon.[9] It may be mentioned that the term *Sāh* or *Sāhū* was used in medieval times for a big Hindu merchant and banker.[10]

When 'Alā'u'ddīn Khaljī (1296–1316) attempted to reduce prices of luxury commodities, he advanced 20-lacs of *ṭankas* to the Multānīs, to enable them to supply finer goods (*aqmasha*) regularly to Delhi.[11] The Multānīs did not benefit only from such direct assistance from the government. They prospered also by meeting the requirements for cash of members of the ruling class, who either because of the seasonal

[1] Sirāj [136], I, 426.

[2] Digby [287], 42–7.

[3] Minhāj Sirāj refers to a great Sayyid of Samarqand, the son of Sayyid Jalāl Ṣūfī, guardian of the Khānqāh of Nūru'ddīn A'immī at that city, who came for this purpose in 1259 ([136], II, 215).

[4] Malik, ed. [3], 192–3.

[5] Baranī [140], 298, 353.

[6] Nizami, ed. [4], 241.

[7] Baranī [140], 298, 353.

[8] Baranī [140], 120, 164.

[9] 'Bahār' [183], s.v. *Multānī*.

[10] Baranī [140] complains that in the capital rich Hindus got themselves styled *Rāi*, *Rāna*, *Thākur*, *Sāh*, *Mehta* and *Pandit* (*Fatāwā-i Jahāndārī*, I.O. MS. f. 120b). See Habib [345], 400, 418–19, for sixteenth century references to *Sāhu* and *Sāh*.

[11] Baranī [140], 311. Cf. 'Afīf [143], 293, for such advances; he does not, however, call the merchants Multānīs.

variations in the income from their revenue assignments or simply out of improvidence, borrowed heavily from the Multānīs and *Sāhs*. Speaking of the nobles of Balban's time (1266–86), Baranī says:

> The Multānīs and *Sāhs* of Delhi who have acquired abundant wealth have derived it from the resources (*daulat*) of the old nobles (*maliks* and *amīrs*) of Delhi. The latter took loans from the Multānīs and *Sāhs* beyond limit, and repaid the advances with largesses (by drafts) upon their *iqṭā'*s (revenue-assignments). The moment a *khān* or *malik* held an assembly and invited notables as guests, his functionaries rushed to the Multānīs and *Sāhs*, and giving them drafts (*qabẓ'hā*) upon themselves took loans at interest.[1]

Under the harsh rule of 'Alā'u'ddīn Khaljī, the Multānīs and *Sāhs* yet retained their great wealth unscathed, side-by-side with the nobles and bureaucrats.[2]

Ibn Baṭṭūṭa also makes a reference to the *Sāhs*. He says the Hindu merchants of Daulatabad were so called, and adds that they were similar to the Akārim or Kārim of Egypt. The Kārim were a loose corporation of Muslim merchants trading in the Red Sea and Indian Ocean from the twelfth to fourteenth centuries. Probably what Ibn Baṭṭūṭa wishes to convey is that the *Sāhs* cooperated with each other in the various commercial enterprises in the same manner as the Kārim.[3] Clearly, this must have been largely due to the caste ties which bound the Indian merchants together.

A group of people who first appear in this period in Indian commercial history are the brokers or *dallāls*.[4] The brokers operating between merchants and customers were thought to raise prices unduly; and Baranī wholeheartedly lauded 'Alā'u'ddīn Khaljī's severity towards them.[5] But the need for the brokers in any large market was so obvious that they could never be dispensed with entirely.

PRICES AND WAGES

In this section little more can be done than collecting together such information as we have for the fourteenth century, and marking some large shifts in the general levels of prices in northern India during that century.

'Alā'u'ddīn Khaljī's price-control measures enticed the historian Baranī not only into giving us important price data, but also into reflections as to the factors which govern prices and the relationship

[1] Baranī [140], 120.
[2] Baranī [140], 113.
[3] It is of some interest that Goitein should suggest that 'the formation of the Kārim group was inspired by an Indian model' [318], 360.
[4] Qaisar [456], 220, indeed speculates that the institution was an importation.
[5] Baranī [140], 313–14.

between prices and wages.[1] His prices of wheat at Delhi under 'Alā'u'ddīn Khaljī (1296–1316), viz. 7½ *jītals* per *man* (maund)[2] is corroborated by Shaikh Naṣīru'ddīn, who quotes 7 *jītals* at one place, and 7½ at another.[3] Such corroboration invites respect, and minor discrepancies between Baranī's earlier and final version need not cast doubt upon his general accuracy. In the case of foodgrains both versions give identical prices for one *man* of wheat (7½ *jītals*), barley (4 *jītals*) and *moṭh* (3 *jītals*). Only gram is rated at 4 *jītals* in the first and 5 *jītals* in the final version. Both Baranī and Naṣīru'ddīn also give us cloth prices, but it is difficult to use them for comparative purposes.[4]

The lower costs of subsistence (and perhaps, the fixed prices of manufactured articles) lowered wages. Māhrū recollected that in the reign of 'Alā'u'ddīn Khaljī, the artisan's wage amounted to 2 or 3 *jītals* a day; a weaver wove a sheet (*chādar*) for 2 *jītals*; a tailor stitched a robe for 4 (Naṣīru'ddīn says, 4 or 6) *jītals*.[5] The daily rate of 2 to 3 *jītals* accords with Baranī's statement in his first draft that six *jītals*-worth of bread and meat stew could suffice for seven or eight persons. The same historian also says that a *chākar* or servant under 'Alā'uddīn got 10 or 12 *ṭankas*: he probably means annual pay (hence a day-wage of about 2 *jītals*).[6] Baranī argues that owing to the low wages, ordinary people did not benefit from the low prices. The saying went, 'A camel sells for a *dāng* (copper coin); but who has got a *dāng*'?[7]

It is not possible to define the territory in which 'Alā'u'ddīn Khaljī's price measures were effective. Baranī speaks as if the prices were set for Delhi; but it is reasonable to infer that prices should have been approximately the same in towns in the surrounding region, which could offer alternative markets for products. This probably included towns within the region where the land-revenue system instituted by 'Alā'u'ddīn Khaljī was in force, extending from Lahore to Chhain in the south and Katehr in the east.[8] It is unlikely that the price-control measures extended to towns outside this region. A letter in Māhrū suggests that prices were kept low under 'Alā'u'ddīn Khaljī in Multān and Uchh as well; but a closer scrutiny of the text allows the possibility that he was comparing the state of affairs in Delhi at the time of that sultan with contemporary conditions in Uchh.[9]

1 Baranī [140], 303–19. Digby has discovered an earlier draft of the section, which misses out many of the details and most of the reflections in Baranī's final version. It adds, however, a few particulars omitted later on by Baranī.

2 Baranī [140], 305.

3 Nizami [4], 185, 241.

4 Baranī [140], 310; Nizami [4], 240.

5 Māhrū [5], 48; Nizami [4], 240. In his earlier draft Baranī says, the tailoring charges were only 2 *jītals* for a robe (*jāma*).

6 Baranī [140], 385. The same rates are given in his first draft.

7 Baranī [140], 312.

8 Baranī [140], 288.

9 Māhrū [5], 48.

Shortly after 'Alā'u'ddīn Khaljī's death, his price-control system collapsed; under his successor Quṭbu'ddīn Mubārak Khaljī (1316–20) prices rose rapidly, and wages went up 'four times'.[1] Prices for various commodities prevailing in the reign of Muḥammad Tughluq (1324–51) were obtained by the author of the *Masālik al-Abṣār* from an eminent Indian, Shaikh Mubārak. Wheat now sold normally for 12 *jītals* ($1\frac{1}{2}$ *hashtgānīs*), i.e. at 160 per cent of the price under 'Alā'u'ddīn Khaljī, the increase in the price of rice was of a similar magnitude, though exact comparison is made difficult by the fact that Baranī gave the price (5 *jītals*) for paddy (*shālī*) during the earlier reign, while the *Masālik al-Abṣār* quotes 14 *jītals* ($1\frac{3}{4}$ *hashtgānīs*) for husked rice.[2] Much lower prices prevailed in Bengal. Ibn Baṭṭūṭa's names for coins and weights introduce an element of confusion, but if his silver *dīnār* was the *hashtgānī*, his *dirham* the *jītal*, and his '*raṭl* of Delhi' the *ser*,[3] then his prices can be restated directly in the known Indian coins and weights. The price for rice was deemed to be high in Bengal when it sold for *25 ser* per *hashtganī*, or about 13 *jītals* per *man*. Normally, 2 *mans* of unhusked, or $1\frac{1}{4}$ *mans* of husked rice are said to have sold for one *hashtgānī* in Bengal. At less than $5\frac{1}{2}$ *jītals* per *man*, husked rice in Bengal was thus substantially cheaper than at Delhi (where it sold at 14 *jītals*).[4]

Information about prices that prevailed during the reign of Fīrūz Tughluq (1351–88) has come down to us from many sources. This sultan gave up all attempts at controlling prices; and merchants and engrossers (*muḥtakirān*) are said to have had a happy time under him.[5] Speaking about 1354, Naṣīru'ddīn of Delhi recalled with nostalgia the low prices prevailing under 'Alā'u'ddīn Khaljī and complained of high costs of subsistence in his own time. Both he and Baranī illustrate the high wages now (1350s) prevailing by describing a twelve-fold increase in the tailors' rates; Naṣīru'ddīn says they had gone up from 4 or 6 *jītals* for a robe to 1 *ṭanka* (48 *jītals*), while Baranī says the rates had risen from 2 *jītals* to $\frac{1}{2}$ *ṭanka* (24 *jītals*).[6]

The earlier part of Sultan Fīrūz Tughluq's reign also saw a scarcity in the Multān region with *juwārī* selling for 80 *jītals* per *man*. 'Ainu'l Mulk Māhrū, our source for this, is also the first authority to give an indication of a great decline in prices that was to occur in the same reign, beginning probably in the late 1350s or early 1360s. He says that as the scarcity disappeared, *juwārī* began to sell for a mere 8 *jītals*,[7] a price still

[1] Baranī [140], 385. With some arithmetical inconsistency he adds that the (annual) pay of a *chākar* went up from 10 and 12 *ṭankas* to 70 or 80 or 100 *ṭankas*.

[2] Baranī [140], 305; 'Umarī [69] (trans. Siddiqi and Ahmad), 59.

[3] For this last identification, see: 'Umarī [69] (trans.), 59.

[4] Ibn Baṭṭūṭa [68], (text), 610.

[5] Baranī [140], 554.

[6] Nizami, ed. [4], 185, 240–41; Baranī [140], first draft of account of Alā'u'ddīn's price-control measures (text supplied by Simon Digby).

[7] Māhrū [5], 74.

higher than that of wheat at Delhi under 'Alā'u'ddīn Khaljī. At another place, Māhrū complains that wages of artisans in Multān and Uchh had risen considerably: tailors and weavers now charged some 7½ and 15 times more than the rates he remembered from the days of 'Alā'u'ddīn Khaljī. This was ascribed by the artisans to the impact of the rise in prices during the above-mentioned scarcity. But now that prices were declining, the wages still continued at the same high pitch – a fact causing annoyance to the aristocrat and one which he probably exaggerates.[1]

'Afīf gives us the picture of the situation when the downward trend of prices – unaided, as he stresses, by 'any effort on the part of the Emperor' – was completed. The prices now regarded as normal at Delhi were 8 *jītals* per *man* for wheat, and 4 *jītals* per *man* for gram and barley.[2] These prices justly reminded 'Afīf of the cheapness of 'Alā'u'ddīn Khaljī's days. He says the prices continued at these levels until the close of Fīrūz Tughluq's reign, whereafter, he implies, they again began to rise. Certainly, his sense of wonder at the prices under Sultan Fīrūz Tughluq suggests that by the time he was writing (early fifteenth century), the price-level was much higher.

The factors behind these downward and upward movements in the latter half of the fourteenth century cannot be clearly established. 'Afīf might be right in ascribing the low prices under Fīrūz Tughluq to a succession of successful harvests; and the political dislocation after Fīrūz Tughluq's death, especially Tīmūr's invasion (1399) must have caused considerable disruption to economic life and so helped raise prices. It is also, of course, possible that the worldwide state of silver supply was behind at least some of the secular movements. But this aspect has not so far received the scholarly attention it is entitled to.

SLAVERY

As an institution, slavery has had an ancient history in India, and its existence on the eve of the Ghorian conquests is fairly well documented.[3] But with the Ghorian conquests and the establishment of the sultanate, it seems to have achieved a new scale and acquired much greater economic significance.

There is little doubt that, like Julius Caesar's invasions of Britain, the Ghaznavid and Ghorian invasions of northern India were partly the undertakings of slave-raiders. A successful campaign would be

[1] Māhrū [5], 48. He says the weaver now charged 30 *jītals* for weaving a sheet, compared with 2 *jītals* under 'Alā'u'ddīn Khaljī, and tailors would not take 30 *jītals* for stitching a robe whereas they took only 4 *jītals* under Sultan 'Alā'u'ddīn.

[2] 'Afīf [143], 293–5.

[3] Gopal [323], 71–80.

judged not only by the quantities of gold and silver acquired, but also the number of captives, men, women and children, along with horses and cattle. Thus Quṭbu'ddīn Aibak's invasion of Gujarat in 1195 netted him 20,000 slaves (*burdas*). Seven years later (1202), as a result of his raid on Kalinjar, '50,000 slaves were brought under chains'.[1] Slaves continued to be the object of military expeditions after the Delhi sultanate was established. A raid by Balban on Ranthambhor (1253) gained him 'countless horses and slaves'.[2] In the instructions that 'Alā'uddīn Khaljī (1296–1316) is said to have issued to Malik Kāfūr before his great campaigns in the Deccan, it is assumed that 'horses and slaves' would form an important part of the booty.[3]

Slaves began also to be obtained increasingly through military or 'punitive' expeditions within the limits of the sultanate. The rebellious or *mawās* areas as well as villages that presumably did not pay revenue, were among the major sources of slaves. As a result of a successful expedition of Sultan Balban (1266–86) in the Doab, slaves and cattle (from being collected in large numbers in booty) became cheap in the capital.[4] Niẓāmu'ddīn offers the story twice of an old woman slave who had been seized in the *mawās* of Katehr.[5] His disciple Naṣīru'ddīn related how a village in the territory of Ajodhan (Panjab) was attacked and its people made into slaves by the *muqṭi*' or governor.[6] Ibn Baṭṭūṭa tells us of the rustic women captured in the course of armed expeditions; these fetched very low prices because of their large numbers and uncultured ways.[7]

The numbers of slaves so collected must indeed, have been vast and grew in time. Sultan 'Alā'u'ddīn Khaljī (1296–1316) had as many as 50,000 slaves in his establishments; the number reached 180,000 under Sultan Fīrūz Tughluq (1351–88). Fīrūz Tughluq's slaves included 12,000 artisans (and 40,000 attendants (soldiers?)) at the court.[8] Nobles, too, had their large retinues of slaves. Fīrūz Tughluq's minister Khān Jahān Maqbūl was said to possess no less than 2,000 concubines.[9] But slaves were not just an aristocratic possession. Even the poor among the respectable classes could not do without slaves. Nūr Turk (fl. *c.* 1236), a mystic of Delhi, lived on the earnings of his slave, who was a cotton-carder.[10] Niẓāmu'ddīn, a young student living in great poverty with his mother at Badaun, had yet a maid-slave (*kanīzak*).[11]

[1] Nizāmī [135], 424, 459 (trans. E & D, II, 230–31). Though a contemporary source, it is so full of rhetoric and hyperbole, that one must allow for a great deal of exaggeration before accepting its statements, especially where numbers are concerned.

[2] Sirāj [136], II, 65.

[3] Baranī [140], 327.

[4] Baranī [140], 57.

[5] Malik, ed. [3], 278, 340.

[6] Nizami, ed. [4], 236–8.

[7] Ibn Baṭṭūṭa [68], 507; (trans. Husain), 123.

[8] 'Afīf [143], 267–73.

[9] 'Afīf [143], 399–400. Cf. also 288–9.

[10] Malik, ed. [3], 334–5.

[11] Nizami, ed. [4], 191.

Since slaves under Muslim law are saleable as any chattel, there was a large slave market. In the course of his detailed description of 'Alā'u'ddīn Khaljī's price regulations, Baranī describes the slave market of Delhi, and the prices fixed for slaves at that time. A woman slave for domestic work cost from 5 to 12 *ṭankas*; a concubine, 20 to 40; untrained slave-boys, 7 or 8 *ṭankas*; and trained slaves, 10 to 15 *ṭankas*.[1] In 1318 the purchase of a girl slave for 5 *ṭankas* at Devagiri is recorded.[2] These prices compare curiously with some others quoted for 'Alā'u'ddīn Khaljī's Delhi: the most inferior horse (*tattū*) was priced at 10 to 25 *ṭankas*; and a milch buffalo cost 10 to 12 *ṭankas*.[3] In Muḥammad Tughluq's reign, low prices for slaves continued to prevail: a slave-girl for 8 *ṭankas*, and a maidservant or concubine for 15 at Delhi; and for still lower prices outside the capital.[4] Only Baranī mourns that the slaves cost much more when he was writing (1359).[5] This was undoubtedly part of a general rise in prices; but also perhaps reflected a fall in the supply of slaves on the market owing to the decline in the military power of the sultanate.

The plenitude of slaves in India encouraged a continuous export of slaves, for whom the demand in the Islamic world was quite considerable. When Minhāj Sirāj received news that his sister was alive in Khurāsān, and he wished to send her help, the sultan gave him forty slaves and a hundred ass-loads of goods to send to his sister. He arranged their dispatch from Multan.[6] Niẓāmu'ddīn tells an anecdote of a dervish who engaged in commerce and sold at temptingly high profits slaves carried from Delhi to Ghazni.[7] But the export of slaves was forbidden under Fīrūz Tughluq,[8] possibly because he aimed at collecting a large slave retinue himself. When Tīmūr invaded India in 1398–99, collection of slaves formed an important object for his army; 100,000 'Hindū' slaves had been seized by his soldiers and camp followers. Even a pious saint had gathered together fifteen slaves. Regretably, all had to be slaughtered before the attack on Delhi for fear they might rebel.[9] But after the occupation of Delhi the inhabitants were brought out and distributed as slaves among Tīmūr's nobles, the captives including 'several thousand artisans and professional people'.[10]

About the actual conditions of slaves, there is little information. Quite naturally they varied: on the one hand, there were the élite slaves, the

1 Baranī [140], 314.
2 Malik, ed. [3], 339.
3 Baranī [140], 313–4.
4 'Umarī [69] (trans. Siddiqi and Ahmad), 51.
5 Baranī [140], 314. He is more explicit in his earlier version where he suggests a ten-fold increase in prices of the more expensive slaves. (Reference supplied by Digby.)
6 Sirāj [136], II, 61.
7 Malik, ed. [3], 192–3.
8 Māhrū [5], 213.
9 Yazdī [144], II, 92. Yazdī's definition of Hindus was rather elastic. 'Hindus, of no religious faith' are represented as having collected together in the congregation mosque at Delhi! [144], II, 123.
10 Yazdī [144], II, 123–4.

bandas of the sultan, who rose to high ranks in the sultanate. On the other, were the large numbers of domestic or manual slaves (the *burdas*, *kanīzaks*), ministering to the various needs of the higher and middle classes. It is actually with their condition that an economic historian would be more concerned. But unluckily, the information on this subject is very slight. The *ṣūfīs*, who might be expected to have been sympathetic to the slaves, certainly thought that granting freedom to a slave was a meritorious act, even in cases where the freed slave was certain to apostatize from the Islamic faith.[1] And yet this did not prevent them from praying for the recovery of fugitive slaves by their masters.[2] Clearly, the slaves were treated as chattels: for them to be freed by the master was an act of commendable charity; but for the slaves themselves to flee was a sinful assault on private property.

Slavery underwent a perceptible decline after the fourteenth century. Bābur in his account of India speaks of the large number of artisans and workmen organized in hereditary castes,[3] but significantly omits any mention of slaves. European travellers, leaving detailed accounts of the Mughal empire, observed the existence of slavery, but did not notice any large slave-markets of the kind that existed in fourteenth-century Delhi. Nor did they find any slave artisans or indeed any slaves working outside domestic households.

This change in the importance of slavery was quite obviously not due to any ethical transformation of the ruling class. It would seem to be rooted more in the availability of cheaper free labour in such crafts and professions as in an earlier period were of exotic origins or catered for exotic tastes. There, Indian free-caste labour could not immediately meet the requirements of the new ruling class, which found it cheaper to train the slaves for the new tasks. One thinks of crafts such as bow-carding of cotton, wheel-spinning, and paper manufacture, which apparently came with the Muslims to India in the thirteenth century;[4] or of personal service of the nobility and upper classes, for which familiarity with the Persian language and Islamic aristocratic culture was necessary. Nūr Turk's slave in the 1230s was a cotton-carder;[5] and slave-girls (*kanīzaks*) were often employed in spinning.[6] As for personal services, one may recall that 'Imādu'ddīn Raiḥān, the Indian slave of Sultan Naṣīru'ddīn (1246–66) who challenged the power of Balban, was a eunuch, and thus, to start with, presumably a harem domestic.[1] In course of time, as either the descendants of the slaves, converted to Islam, gradually earned freedom and continued in the newly learned

[1] Malik, ed. [3], 5, 278–9, 339–40.
[2] Malik, ed. [3], 425–6; Nizami, ed. [4], 184.
[3] Bābur [168] (2), II, 520.
[4] See: Habib [348], 140–9, 155–6.
[5] Malik, ed. [3], 334–5.
[6] Nizami, ed. [4], 138, 191.
[7] Sirāj [136], II, 66.

professions, or as Indian castes began to take to them by a long process of adjustment, there arose a sufficiently large supply of free skilled labour that could dispense with the demand for slave labour. For slaves in productive work had the obvious disadvantage of lacking the incentive as well as the insecurity of subsistence, which drove and haunted free labour.

4 The currency system

Possibly the most decisive evidence of change in the economic life of northern India after the Muslim expansion is numismatic. Some evidence of a mild economic revival from the tenth century is provided by the reappearance, in limited quantities, of a gold coinage based on older models of a 40 *ratī* standard of which the earliest examples appear to be of the Chedis or Kalachuris of Madhya Pradesh followed by dynasties of northern-central India, the Chandelas of Mahoba, and, most numerous of all, the Gahaḍavālas of Kanawj in the twelfth century. After the Muslim conquest of the Gangetic plain, the earliest gold issues in the name of Mu'izz al-Din Muḥammad bin Sām are of this weight and type, with a conventionalized usage of the goddess Lakshmi on the obverse and the name of the ruler in Nagari characters on the reverse. Clearly they have no Muslim ideological content and must represent the survival of pre-existent arrangement with Indian moneyers to provide a coinage in the name of the ruler of the day. Monetary assay being a skill of goldsmiths and *ṣarrāfs* or money-changers, who down to the present day have mostly been members of the Hindu *sonār* caste, we may assume that the implementation of the monetary policy of Muslim sultans was mainly entrusted to these experts. The mint-master at Delhi during the reign of the Khaljī Sultan Quṭb al-Din Mubārak, Ṭhakkura Pherū, was a Hindu or Jain, and left a valuable treatise written in Apabhramśa regarding the exchange rate and precious-metal content of coins brought to the royal mint for exchange, the coin-types dating in some cases from a century before the time at which he was writing.[1]

Pure silver coinage was extremely scarce in northern India. Recent evidence suggests that, notwithstanding the thirteenth-century chronicler Juzjānī's observations, it was current in Bengal, where the silver came from a more easterly source of supply. The broad-struck bull and triglyph coins of the Chandra dynasty have now been reassigned from the seventh to the eleventh and twelfth centuries, and from Arakan to east Bengal.[2] A large find of more than 300 such coins has been reported

[1] See: [206], 87–101.

[2] D. W. Macdowell, 'Eight coins of Arakan from Sylhet', *Numismatic Chronicle*, 6th Series, xx (1960), 229–33: A. H. Dani, 'Coins of the Chandra Kings of East Bengal', *JNSI*, 24 (1962), 141–2.

from Mainamati in a twelfth-century context.[1] These Chandra dynasty coins are important in suggesting a prototype for the broad-struck silver and gold issues of the Delhi and Bengal sultanates and with regard to the evident dependence of the Delhi sultanate on an eastern source of supply from Bengal, to maintain the silver currency in circulation.

Literary sources are entirely lacking regarding the establishment of a new gold and silver currency, the coin types of which endured in India through the following seven centuries to the present-day white-metal rupee. It may be traced to the overrunning of Bengal by the adventurer 'Alā 'al-Dīn Bakhtyār Khaljī with a small body of horse following the establishment of Muslim power in Delhi and the Gangetic Doab. The conquest of the capital of Gaur provided an occasion for the remission of treasure from Bengal to the Ghurid overlord Mu'izz al-Dīn Muḥammad bin Sām in 1205,[2] as well as later remittances to the Delhi Sultan Shams al-Dīn Iltutmish. Possibly the original remittance was the result of the immediate striking of coins from captured treasure, as in addition to the Arabic titles of the sultan they bear the Sanskrit inscription *gaura vijaye*, 'at the victory of Gaur'. The recorded weights of 170.8 and 172.18 g. are evidence of the adoption of a new standard, probably of one *tolā* consisting of 96 *ratīs*, (*gunja* seeds of the *abrus precatorius* plant – a light but variable measure in different areas and at different periods in Indian history, used by jewellers and moneyers).

The device upon the earliest gold and silver *ṭankas* remitted from Bengal was a galloping horseman. Unconvincing parallels have been drawn with the static and extremely stylized obverse of the north-western Indian bull-and-horseman coinages. An acquaintaince with the copper horseman-coins on the part of the Muslim invaders of Bengal (who were Khaljīs from the Afghan borderland) is unlikely. The most probable explanation is that this was an imaginative commemoration of 'Alā 'al-Din Bakhtyār's exploit with a very small body of Afghan horse. It is improbable that those who introduced the new coinage were influenced either by Indo-Greek *tetradrachms* or by the Gupta gold coinage of many centuries earlier. A model for the broader silver pieces may well have been suggested by the lighter Chandra silver coins still in circulation. The metrology of the new coinage is firmly Indian with no parallels in earlier Islamic coinage. Accordingly the decision to mint gold and silver coins in these weights (though we have no evidence for the silver coins till fifteen years later) may have been a chance decision, but it was of paramount importance in later Indian monetary history.

[1] M. H. Rashid, 'The Maịnamati gold coins', *Bangladesh Lalit Kala*, 1: 1, pp. 41, 45, 57–8. The hoard must be assigned to the twelfth century A.D. It contradicts the Muslim chronicler Juzjānī's assertion that there was no silver coinage current in Bengal in the period immediately before the Muslim conquest – see *Ṭabaqāt-i Nāṣirī* (trans. Raverty), p. 556.

[2] Lowick [395], 196–208; P. L. Gupta, 'Nagari legend on horseman tanka of Muhammad bin Sam', *JNSI*, 35 (1973), 210–12.

The earliest issues of gold and silver coins from Delhi itself often have a commemorative character, reflecting the immediate coinage of hoards plundered or remitted in tribute. However, the remonetarization of the economy must have occurred by the middle of the thirteenth century, for at this period the Suhrawardī *shaykhs* of Multan left assets of *lakhs* of *ṭankas*. By the first decade of the fourteenth century, the salary of a trooper or knight with one horse was calculated at 234 *ṭankas* per annum, with the increment of 78 *ṭankas* if he maintained a second warhorse. As we shall see below, the purchasing power of such a salary was considerable.

In the monetary system of the Delhi sultanate a firm equation between gold and silver appears to have been established at 1:10. The plunder of Hindu kingdoms and religious establishments yielded both gold and silver. An inflexibility of monetary policy did not lead to the considerable fluctuations in the rate between the two metals which is visible in medieval Europe and Mamlūk Egypt, but rather to the disappearance from circulation of the scarcer metal, which was silver.

The prevalent coin of north-western India in the late twelfth and early thirteenth centuries was a debased variety of the bull-and-horseman issues of the Hindūshāhī kings of Kabul and Waihind, which was current in the later Ghaznavid kingdom of Lahore and had spread south-eastwards into Rajasthan and northern-central India. It was the money of account, called by the Muslim conquerors *dehlīwāl* (i.e. Delhi coin). In the inscription recording the construction of the mosque at their new capital the cost of the material from twenty-seven Hindu temples re-employed in its construction is reckoned at 12 million (or 120 *lakhs*) of *dehlīwāls*. H. Nelson Wright argues that with the standardization of the Delhi coinage by Shams al-Dīn Iltutmish (1210–35) the small silver content of these coins was reduced by nearly a half. The *jītal*, as the coin came to be called, was of 32 *ratīs* weight. The value of its silver and copper combined equalled 2 *ratīs* of silver; the relative value of silver to copper was 1:80. The *jītal* changed at 1/48th of a silver *ṭanka* in northern India and 1/50th in the Deccan after the Muslim conquest of Devgiri; the difference is accountable by a slightly higher price for copper in southern India, where it was imported from overseas.[1]

The existence of smaller moneys of account in the capital city of Delhi is demonstrated by Baranī's numerous references to *dāngs* ('quarters')

[1] Wright [549], 393–8, 401. Nelson Wright convincingly refuted the contention of Edward Thomas that there were 64 *jītals* to the silver *ṭanka*, *Chronicles of the Pathan kings of Dehli*, London, 1871, pp. 3–4. Nelson Wright appears also to argue that the *jītal* or *dehlīvāl* in the early thirteenth century represented 1/12th of a *ṭanka*; but his demonstration that from the end of that century the *jītal* was 1/48th part of a *ṭanka* is convincing, see op. cit., pp. 397–8. See also p. 96, note 1, below.

and *dirams*. From a comparison of prices quoted in the different recensions of his work it is possible to establish the equation: 1 silver *ṭanka* = 48 *jītals* = 192 *dāngs* = 480 *dirams*.[1] The *dāng*, called *fils* (pl. *fulūs*) by the Arab geographer al-ʻUmarī, may be identified with the 40-*rati* weight pure-copper coin which persistently appears in the coinage of the Delhi sultans and '*dirams*', single or multiple, with smaller copper issues. Similarly, binary multiple *jītals* or fractions of the *ṭanka* are represented by tiny silver issues, mainly in the thirteenth century, or by mixed silver and copper issues (billon), whose denomination could be distinguished by their silvery appearance at the time of minting and by assay.

It is clear that the establishment of a trimetallic coinage in northern India in the thirteenth century was heavily dependent on the remittance of gold and silver from Bengal, some of the gold as well as the silver issues having been minted there. The remittances from Bengal were irregular, dependent on the degree of fear in which the local governor or sultan stood towards the power of the Delhi sultan. Equally coinages represented a 'dethesaurization' (E. Ashtor's term) or release of treasure from hoards into monetary circulation, derived from the plunder of the treasure of local rulers or religious establishments. Here we note two forces in operation. In hoarding, the more precious metal, gold, is more likely to be withdrawn from circulation than the less precious silver. Hence when hoards are released into circulation, the ratio of exchange between gold and silver is likely to be under pressure. Secondly, while most of the gold hoarded in India must have come from the western world, though there was the maritime import of gold to India from China during the period, there is also evidence of a continuing import into Bengal of silver which represents the surplus of a trade balance probably from an inland source.

With the successive plunder of the Deccan kingdoms at the end of the thirteenth and beginning of the fourteenth centuries, which were more prosperous in the preceding centuries than northern India, a great quantity of precious metal came into the hands of the Delhi sultans, though less of silver than of gold. One may perhaps accept the information of the sixteenth and seventeenth-century historian Farishta that the indemnity extracted by 'Alā 'al-Dīn Khaljī from Rāmadeva of Deogiri in his raiding expedition before his usurpation of the throne amounted to roughly 7.7 metric tonnes of gold and 12.8 metric tonnes of silver, and we note the shorter supply of silver. Towards the end of the reign, Malik Kāfūr's plundering expedition to the Paṇḍya

[1] The equation is established in a forthcoming article which compares the price lists in the standard recension of Baranī [140], 319–20, with a variant represented by S. Digby collection MS 57, ff. 117–18.

kingdom is said by the fourteenth-century historian Baranī to have brought back 96,000 *man* of gold, which would correspond to 241 metric tonnes; it is likely that this is an exaggeration. Subsequent expeditions in the reigns of Quṭb al-Dīn Mubārak, Ghiyāth al-Dīn Tughluq, and Muḥammad bin Tughluq extracted the remaining available surplus.

The consequence of this acquisition of wealth is visible in the coinage of the Delhi sultanate. Both the gold and silver issues of 'Alā 'al-Dīn Khaljī are plentiful, and the brighter appearance of the silver issues, due to the absence of lead, distinguish these issues from those coined from the eastern Indian source. The gold coined in this reign provided a vast surplus, not wholly exhausted by the policy and largesse of Muḥammad bin Tughluq. When, at the close of the fourteenth century, Timur plundered Delhi, his officers found stores of *ṭankas* coined in 'Alā 'al-Din's name.

The predominance of gold over silver now released into circulation placed a strain on the monetary relation between the two metals of 10:1, with some evidence for an unofficial exchange-rate of 7:1. The coinage of the Delhi sultanate was more efficiently controlled than any Middle Eastern or European currency of the period, with the fixed ratio between the two precious metals remaining constant; this may reflect the exact calculations of Indian money-changers.

The disturbance of the gold:silver rate becomes apparent after the accession of Muḥammad bin Tughluq in 1325, probably made visible by this monarch's keenness for monetary innovation. Very shortly gold coins one-sixth above and one-sixth below the 196-*rati* standard were issued, followed in his third year by a mixed-metal *ṭanka* of 80 *ratīs* weight, one-sixth reduced in weight from the silver coin, with a silver content of about 45 grains, a little more than a quarter of what was found in the earlier coins. Three years later the sultan tried a more desperate expedient, the issue of a token coinage of brass and copper to replace the silver coinage. It is clear from Baranī that he was led to this by accounts of Chinese token currency (*chao*) in the form of silk or paper notes of credit.[1] The disruption of commerce which this token currency caused led to its withdrawal two years later.

It is clear from the scale of Muḥammad bin Tughluq's subsequent military operations, from the plentiful gold coins issued later in his reign and accounts of his largesse to foreign visitors, as well as from evidence cited elsewhere that the accumulated treasure of the Delhi sultanate was not exhausted, but the problem was one of the relative scarcity of silver in a cash economy with urban inflation. This was soon accentuated by the loss of political control of Bengal.

[1] Baranī, variant recension (see preceding note), f. 167v.

The sources of the silver supply of Bengal remain obscure. It can hardly have been a Far Eastern maritime source, for this would also have reached Coromandel, Kerala, and Gujarat and have been reflected in currencies. We have earlier noted the eleventh-and twelfth-century silver coinages of the Chandra dynasty; during the Mughal dynasty strong silver coinages are characteristic of Assam, Tipperah, Nepal, and other border states of north-east India. The silver coinage of the sultans of Bengal continues uninterrupted and plentiful from the middle of the fourteenth to the middle of the sixteenth century; and the revival of silver rupee coinage throughout northern India immediately follows Sher Shāh's conquest of Bengal. Further evidence against a Far Eastern maritime source of supply in the early sixteenth century is provided by the Portuguese, Pires, who mentions the profit of 25 per cent on its import from Bengal to Malacca.[1] As no significant quantity of silver is found in Bengal, an overland source of supply is implied. From Tavernier's seventeenth-century evidence, this may have been from Yunnan. The argentiferous lead galena in Burma is another possible source and there is later eighteenth-century evidence of silver brought from Tibet to Nepal, which may have been conveyed to eastern India.

Literary evidence confirms the demand of the Delhi sultans for silver from eastern sources. Muḥammad bin Tughluq's governor Qadar Khān was preocuppied with gathering revenue in the form of silver *ṭankas*; the more he gathered the better, he used to say.[2] The silver *ṭankas* were gathered, but his unpaid soldiery turned to the local pretender Fakhr al-Din before the hoard was dispatched to Delhi.

Surviving examples of the pure-silver coinage of Muḥammad bin Tughluq's reign are much scarcer than the gold issues. The situation grew more acute in the reign of his successor Fīrūz Shāh, from which only four silver 96 *ratī* pure-silver *ṭankas* have been recorded.[3] The quest for silver is indicated by the realization of arrears of revenue from Hindu chiefs in the region of Gorakhpur at the outset of Fīrūz Shāh's expedition against Ilyās Shāh of Bengal in 1359; the arrears were realized in silver *ṭankas* and bags of silver were distributed to the Muslim religious establishments of Delhi. In the Broach hoard of the late-fourteenth century in western India, about 1,200 silver coins from western Asia were recorded, but none from the Delhi sultanate which ruled over this area.

The monetary system initiated by the Muslim expansion in the early thirteenth century was in decay by the middle of the fourteenth century. The debased 80 *ratī* billon *ṭanka* replaced the relatively pure silver *ṭanka* around 1330, though Ibn Baṭṭūṭa clearly reckoned prices in terms of

[1] Pires, *Suma oriental*, II, 93.
[2] Sīhrindī [145], 104–5.
[3] Wright [549], 160, 163–4.

the pure silver *ṭanka* in the following decade. The silver *ṭanka* – supported by denominations of cowries, not copper – remained as a coinage of commercial transactions in Bengal down to the revival of a coinage in precious metals throughout northern India in the middle of the sixteenth century. Elsewhere in Muslim-dominated India in the fifteenth century, as in the earliest days of the Delhi sultanate, gold and silver coinage may have been merely ceremonial, intended not as a currency of trade but as a proclamation of sovereignty or for ceremonial distributions. Gold issues of the later Tughluq sultans of Delhi, some posthumous and dating from the early fifteenth century, and of the Sayyid sultans of Delhi are rare. The fifteenth-century sultans of Kashmir issued rare gold coins of *ṭanka* weight, with almost illegible legends, which must be regarded as commemorating accession. Both gold and silver *ṭankas* survive from the fifteenth-century sultanates of the Deccan, Jawnpur, Malwa, and Gujarat which must be regarded as mainly commemorative or celebratory issues rather than currencies of trade. Apart from Bengal, where the pure-silver *ṭanka* continued to circulate, in fifteenth-century Gujarat smaller coins of moderately debased silver, which must be regarded as a trading currency, were minted and circulated as a result of the import of the silver coinages of the Middle East in exchange for commodities across the Arabian Sea. In the whole of inland Muslim India the fifteenth century is a period of reversion to mixed-metal (billon) currencies, of copper with a scanty admixture of silver, as the standard currency of trade. The Lodi sultans of Delhi, less concerned with traditional Muslim concepts of sovereignty than their contemporary rivals, appear not to have issued gold or silver coins.

Waṣṣāf, an early fourteenth-century Persian historian, saw India as the drain of gold which it had been in earlier and later centuries.[1] It is clear that in spite of Chinese imports, most of the gold, whether it had been concealed as treasure centuries before or had been recently imported, came from the principal Eurasian source, the goldmines of west Africa. From medieval Ghana great quantities of gold passed not only to western Europe but also through the Mamlūk kingdom, which were circulated in eastern trade.

The clearest evidence regarding the import of precious metals into the territories of the Delhi sultanate from the west and of the balances of trade is found in the Broach hoard.[2] The greatest quantity of gold and silver coins is from the Mamlūk kingdom of Egypt and Syria. A considerable number of coins are from the Rasūlid kingdom of the Yemen, probably reflecting a balance on the export of foodstuffs,

[1] Waṣṣāf [138], 300.
[2] O. Codrington, 'On a hoard of coins found at Broach', *JBBRAS*, xv (1882–3), pp. 339–70.

particularly rice, and cotton cloth to south Arabia. The European coins, mainly Venetian, show growing European participation in the spice trade. Coins from the Persian Gulf or Persia are rare. This reinforces other indications that this was a region where, mainly on account of the import of warhorses, the balance of trade involved an export from India.

The drain of Indian riches towards the Middle East, particularly through the Persian Gulf, in Muḥammad bin Tughluq's benefactions and trading advances is vividly attested by Ibn Baṭṭūṭa. Some confirmatory evidence is found in a fifteenth-century Persian revenue manual, which reproduces documents which must date from the reign of the Ilkhān Ghāzān (694–703) or Oljeytu (703–17), more probably the latter in view of the Indian context. The gold at the royal treasury (at Tabriz) which came from India and was coined in *ṭankas* (therefore from the Delhi sultanate), exceeded that from any other source. The gold from India was recorded as 122,000 *mithqāls*, as against 64,000 *mithqāls* of Egyptian gold and 24,000 of 'western' (*Maghribiyya*) gold and 110,000 in the local coinage of Ghāzān Khān.[1]

The overland trade through the Kipchak desert to northern India probably led to an export of specie for the same reason as that from the Persian Gulf to India. Finds of medieval Indian coins in European Russia are exclusively from the southern steppes bordering on the Sea of Azov and the Black Sea. This is in contrast to finds of Sasanian and 'Abbasid treasure and coins in north Russia or Sweden, which reflect the importance in those periods of the trade in furs and in slaves. Though there was a taste for furs among the nobility of the Indian sultanates, this strongly suggests that the coins of the Delhi sultans found their way there in payment for the thousands of warhorses dispatched from this area to the frontier of the Delhi sultan noticed by Ibn Baṭṭūṭa.

With the exception of the brief disordered reign of the usurper Nāṣir al-Dīn Khusraw, gold *ṭankas* of every reign from that of 'Alā 'al-Dīn Khaljī (1296–1316) to that of Fīrūz Shāh Tughluq (1352–88) have been recorded, but no coins of the later Delhi sultanate or the provincial sultanates of the fifteenth century. Though the number of gold coins recovered by Russian institutions is not impressive – forty-two gold coins in all – they are from no less than seventeen different find-spots.[2] The Russian numismatist Bykov on one occasion mentions that they were part of a larger hoard of similar gold *ṭankas* which was dispersed, but nowhere records that they were found in association with other Islamic coins. His evidence fits well with our general thesis of the

[1] 'Abd Allāh al-Māzandarānī, *Risāla-yi falakiyya* [113], 229.
[2] Bykov [247], 146–56.

politico-economic pattern of the Delhi sultanate, viz. that it put into circulation the hoarded treasure captured by its military expeditions and, apart from profligate displays of conspicuous consumption, spent much of this capital upon military *matériel*, the import of war-horses and fighting-men.

CHAPTER IV

VIJAYANAGARA *c.* 1350–1564

The division of this discussion of south India in the middle of the fourteenth century would seem to imply that political periodization and economic periodization are the same, that the political fact of a new great overlordship in the southern peninsula – the Vijayanagara state – had significant and necessary implications for the economic order. There is no reason for this to be true, and it is not true in any simple sense. However, this temporal division can be justified in several ways. Firstly, the warriors who ruled from the city of Vijayanagara on the very northern edge of the macro-region gradually converted Tamil country to a region of exploitation. The major sense in which the term 'empire' applies to the new Vijayanagara state is that the previous heartland of the macro-region was transformed into a subordinate base of support for numerous Telugu- and Kannada-speaking warriors from the northern part of the macro-region. Secondly, the new state was 'the nearest approach to a war-state ever made by a Hindu kingdom' in the words of Nilakanta Sastri.[1] As perhaps never before, resources of the macro-region were devoted to military purposes. Finally, changes in certain forms of local organization in Tamil country at least were quickened during the fifteenth century in response to political changes. For these reasons, it is useful to divide the discussion as has been done while yet insisting that economic features of south India are neither necessarily subordinate to, nor necessarily included under, political developments. This will be clear from the discussion below.

The shift of political focus in the macro-region from its ancient population, wealth, and cultural core in the Tamil plain to the very edge of the region on the Tungabhadra river is only somewhat startling. On the whole, the shift was a very gradual one. It began during the thirteenth century when the Chōḷa state was in decline and the Karnāṭak Hoysaḷas established themselves in the centre of the great Chōḷa overlordship, at the edge of the central Chōḷa domain in the Kaveri basin. There they vied with Tamil warriors from the Pāṇḍya country for authority over locality chiefs, the most clear evidence that the Chōḷa

[1] Sastri [480], 297.

state was finished. The material foundation of these competitors to Chōḷa authority from the north and south consisted of large nodes of prosperous agriculture and trade which had developed in their own territories during the period of the Chōḷa overlordship to the thirteenth century.

Another source of pressure against Chōḷa rule came from within Tamil country itself. Increasingly powerful *periyanāṭṭārs* outside of the Kāvēri basin began to exercise forms of political power never before possible. During the troubled reigns of Kulōttunga III and Rājēndra III (c. 1180 to 1280) some *periyanāṭṭārs* were involved in succession wars, at times appearing to be 'kingmakers'. By the fourteenth century, the material supremacy of the Kaveri sub-region no longer assured that its great chiefs would be the acceptable kingly recipients of the ritual homage of chiefs in other parts of Tamil country.

These changes prepared the ground for yet another development in the gradual supremacy of the northern Vijayanagara state over the Tamil plain: the re-emergence of powerful chieftainships over portions of the Tamil country outside of Chōḷamaṇḍalam. While these chiefs continued to recognize the ritual sovereignty of the Chōḷas, they constituted independent bases of competitive power as well. None of these chiefs proved capable of displacing the Chōḷas as region overlords, but they did join with the Hoysaḷas from time to time in the latters' incursions into Tamil country or they shifted their recognition of ritual authority to the resurgent Pāṇḍyas under Māṟavarman Sundara (1216–38) and Jāṭāvarman Sundara Pandya (1251–70).

It was these increasingly independent chiefs who bore the brunt of the first Vijayanagara incusions into Tamil country during the fifteenth century. At this time, there was no longer a Chōḷa dynasty nor any other overlordship which commanded the recognition of Tamil chiefs. Most of these chiefs, along with Hindu chiefs in Andhra and Karnāṭaka, were permitted by the Vijayanagara rulers to continue their local control on the condition they neither constituted a locus of sovereignty to attract the allegience of lesser chiefs nor granted such recognition to others beside the Vijayanagara rulers.

Given these various factors relating to the expansion of Vijayanagara control over Tamil country, the putative ideological factor of the containment of Islam must be questioned. In Vijayanagara historiography, the existence of powerful Muslim states north of the Krishna river – the Bahmanī sultanate and its successors – are alleged to have constituted such a threat to Hindu society as to make Vijayanagara incursions into the far southern peninsula necessary. Early Vijayanagara expansion came at the expense of great Hindu kingdoms such as the Hoysaḷa state of Karnāṭaka and the Reḍḍi kingdom of Kondavidu in

Andhra. And, as a general explanation, or justification, for the repeated invasions of the far southern peninsula against less august Hindu chiefs, this purported ideological factor hardly deserves the credence it is usually given. These invasions appear more as pillaging raids by Telugu and Karnāṭak warriors; each of these incursions left a small residue of northern warriors and gradually created the basis for the establishment of impressive control of these non-Tamils over Tamil country.

The means by which these northern warriors drew resources from the areas over which their control was established was not bureaucratic, i.e. the regular remittance of taxes from peripheral parts of the state to the centre. Vijayanagara was no more a centralized, bureaucratic state than the Chōḷa, Hoysaḷa, and Pāṇḍya states had been. The organization of this 'war-state', again to quote Nilakanta Sastri, 'was dominated by its military needs'.[1] Great and small warriors, '*nāyakas*', are presented as the key political figures in the Vijayanagara state, and, according to sixteenth-century European reports, some part of the resources which they commanded was transferred to the capital city in the form of tribute. While indigenous sources are at least ambiguous on tribute payments from *nāyakas* to the imperial rulers of Vijayanagara, there is no question about the two principal elements of this 'war-state'. One was the hundreds of local military chiefs who often bore the title of '*nāyaka*'; the other was the system of Vijayanagara fortifications usually under Brahman commanders. These were the core elements of Vijayanagara power in the southern peninsula and the means of imperial control over the macro-region.

The Vijayanagara '*nāyaka* system' constituted a significant modification of the segmentary state of the Chōḷas; it was a system whose antecedents may be found in the earlier politico-military arrangements of the Hoysaḷa kingdom of Karnāṭaka and the Kākatīya kingdom of Andhra. Thus, the Vijayanagara state was an important variant form of segmentary organization in which the chiefly office, *nāyaka*, was more formal and independent of the dominant landed groups of a locality, something which permitted strangers to be fitted into a locality political structure in the way that Telugu warriors were throughout Tamil country. The term '*amaranāyaṉkara*' encapsulates the rights of this chiefly office, for it signifies an office (*kara*) possessed by a military chief (*nāyaka*) in command (*amara*) of a body of troops. This term appears in Vijayanagara inscriptions everywhere in the macro-region along with a related term, '*amaram*', designating a prebend.

According to Fernão Nuniz, a Portuguese horse-trader who sojourned in Vijayanagara for several years during the 1530s, there were some 200 *nāyakas* in the empire, and each held land rights from the

[1] Sastri [480], 297.

Vijayanagara king who, this commentator assumed, 'owned' all land. Setting aside lands granted to Brahmans and temples and lands reserved for royal purposes, scholars of Vijayanagara have estimated that perhaps 75 per cent of the villages of the empire were under '*amaram*' tenure. It is hardly surprising therefore that some of these scholars have spoken of the Vijayanagara state as 'feudal'. Even D. C. Sircar, who vigorously rejects the general proposal that medieval India was 'feudal' is inclined to this designation for Vijayanagara, largely on the strength of *amaram* tenure.[1]

It may be that, among Indian states, the Vijayanagara state does come closest to some forms of 'feudalism', but the differences between this 'war-state' and others in Europe and Japan to which the label 'feudal' has been applied are so fundamental that the concept does not provide a useful framework for discussing the social order at the time.

The '*nāyaka* system' is presented *as a system* only in the reports of Portuguese visitors during the sixteenth century. Their description may reflect less about actual conditions in south India than the conceptions of political oganization which they brought from Portugal or learned of in Brazil where 'captains-general' appear very like their descriptions of *nāyakas* (whom they call 'captains'). The Sanskrit term '*nāyaka*' is a very ancient one denoting a person of prominence and leadership, especially military leadership. During the medieval period this meaning was subordinate to references in the *bhakti* relationship between a god (*nāyaka*) and a devotee (*nāyikā*). It is, in fact, a term upon which too much has been permitted to be borne by some modern historians of Vijayanagara. When we may point to usage as diverse as that applied to warriors of quite local competence to that of the fifteenth-century Gajapati inscription in which the king, Kapilēśvara, is called a '*nāyaka*', it is necessary to question the specifically 'feudal' meaning which is ascribed by some Vijayanagara historians: 'one who holds land from the Vijayanagar king on condition of offering military service.'[2] The more prudent reading of the term '*nāyaka*' is that of a generalized designation for a powerful warrior who at times associated with the military enterprises of Vijayanagara kings, but who, at all times, was a territorial magnate in his own right.

This suggestion is supported by changing historiographical judgements of the '*nāyaka* system' which may be traced through the views of Nilakanta Sastri, the doyen of south Indian historians. He wrote in 1946 that *nāyakas* were absolutely dependent upon the will of the Vijayanagara kings until 1565 when they achieved a semi-independent status.[3] Writing nine years later in the first edition of his *A History of South*

[1] *Seminar on Land System and Feudalism in Ancient India* [485], 33; Sircar [514], 17.

[2] Sircar [514], 214.

[3] Sastri and Venkataramanayya [21], 299.

India, Nilakanta Sastri adopted feudal terminology, speaking of *nāyaka* 'feudatories' with conditional military tenure. Finally, most recently, in 1964, Nilakanta Sastri writes that 'the empire is best looked upon as a military confederation of many chiefs.'[1] Thus, while some recent writers take one or another of the views espoused by Nilakanta Sastri over the years, it is proposed here that the most plausible understanding of the *nāyaka* institution of the Vijayanagara period sees the segmentary state continuing, but with chiefs of localities (whom 'Abdu'r Razzāq in his fifteenth-century account of Vijayanagara called, 'powerful men of each province')[2] possessing a greater degree of independence from local society than ever before in Tamil country, though more commonly seen in pre-Vijayanagara Andhra and Karnāṭaka.

Important local personages in the mixed Kannada-Telegu-speaking region where the Vijayanagara state originated and maintained its greatest strength until the late sixteenth century, called themselves '*nāyakas*'. And, the title was almost invariably adopted by Telugu warriors who remained behind after one of the numerous incursions into Tamil country in the fifteenth century and later. Colin Mackenzie of the early nineteenth-century Madras government collected dozens of accounts of the descendants of these Telugu migrants to Tamil country – usually called 'poligars' (*pāḷaiyakkārars*). Their territories lay along the foothills and in the hills bordering the Tamil plain through its entire length. For the most part, these were chiefly rulers of small and remote tracts first opened by Telugus from the dry Rayalaseema portions of Andhra. These warriors and their peasant followers were attracted to the relatively prosperous Tamil plain where they combined settled agriculture with predation upon the settled communities of Tamil peasants.[3] Only to a minor extent did these migrants displace the dominant landed groups of Tamils in the northern portions of the plain. The modern markers of these intrusive Telugu warriors are a zone of Telugu-speakers running the length of modern Tamil country along the hill border of the plain; in these places, a particularly dense concentration of Vishnu temples reflecting the sectarian preferences of medieval Telugus.

In addition to a new, more explicitly martial conception of chieftainship in the macro-region, the 'war-state' of Vijayanagara produced another politico-military change over its territory: its forts and Brahman commanders. Here, indigenous sources are as full as the foreign reports are with respect to the '*nāyaka* system' and considerably more convincing. The didactic Telugu poem, *Āmuktamālyada*, attributed to the greatest of the Vijayanagara rulers, Krishṇadevarāya, dwells much upon

[1] Sastri [482], 79. [2] E. & D [133], IV, 117.
[3] For summaries of the Mackenzie manuscripts see Taylor [23, 22].

the relationship of forts, Brahmans, and dispersed tribal groups. These three elements were to be given the highest order of state attention for through them Vijayanagara military supremacy, as well as its ability to draw fighting-men for its wars, was maintained. Finally, Brahman-commanded fortesses were intended as an insurance against the creation of anti-Vijayanagara coalitions of warriors within the macro-region. Vijayanagara inscriptions amplify upon these mainstays of imperial control.

Again, contrasts with the Chōḷa state are important. In Chōḷa times, the support of Brahmans and their settlements was granted by locally dominant peasant groups through their spokesmen, the *nāṭṭār*. During the Vijayanagara period, Brahmans became increasingly the instruments for enhancing imperial control through the direct political function of Brahmans as *durgādhipatis*, fortress commanders and governors. Many Brahmans from Maharashtra were introduced into the macro-region for this and other administrative purposes. Local Brahmans, of course, continued to afford a reliable means for ambitious and often hazardously perched stranger chiefs to legitimate their recently won local control in Tamil country. This was not, as in Chōḷa times, achieved by the creation of *brahmadēyas*, but by the cooperation of Brahmans with these chiefs in their support to temples, usually dedicated to Vishnu deities. Evidence of this is found in the *Āmuktamālyada*, in their *kaifīyats* of the *Mackenzie Collection*, and in the thousands of temple inscriptions of the period.

These various political and military arrangements in Vijayanagara society had consequences regarding agrarian relationships. As might be expected, relations involving the land varied considerably over the macro-region as a result of environmental, historical and other factors. While it is true that the gap in prosperity and wealth between Tamil country and other parts of the macro-region closed from the thirteenth century onward, a differential in wealth continued to exist. However, it is not relative wealth, but governance and the control over local resources which has constituted a persistent interpretational problem in Vijayanagara history.

For some scholars, particularly those who have based their analysis upon Andhra and Karnāṭaka (e.g. B. A. Saletore and N. Venkataram-manayya), there was little or no change perceived with respect to local society and culture as a result of the establishment of the Vijayanagara state. The essential difference to which these scholars draw attention is that of ideology. The struggle to maintain Hindu institutions in the face of an Islamic threat is believed to have produced a militant defence of existing institutions. The term '*pūrvamariyadē*' (ancient usage) is invoked in this debate, with the proponents of the view that there were few social

and cultural changes in south India arguing that 'ancient usage' was preserved. Other scholars who have worked in Tamil history primarily (e.g. K. A. Nilakanta Sastri and A. Krishnaswami) acknowledge the ideological basis of Vijayanagara, but argue that, under the Vijayanagara protectors of Hinduism, many of the earlier social and economic arrangements of south India changed. The issue hinges on the extent to which local, agrarian institutions were undermined by the expansion and consolidation of the Vijayanagara system. Specifically, these divergent views focus upon the question of why such local institutions as the *sabhās* of Brahman settlements, the *ūrs* of peasant settlements, the *nāḍu* locality assembly – all institutions found best developed in Tamil country – first declined, and then virtually disappeared during the Vijayanagara rule.

Krishnaswami takes explicit note of this historiographical controversy:

> ...we have to shape our views between the two extremes – the one maintaining that the local rulers of Vijayanagara continued to support local institutions and the other stressing that they did not actively support them. The safe course seems to be that the attitude of rulers toward local institutions was sympathetic to begin with, but later, circumstances forced them to leave the institutions to their own fate – that is decline. It is true that the members of the Śaṅgama dynasty [the first dynasty of Vijayanagara, 1336–1485] followed the noble principle of 'Pūrvamariyādi-bhaddati' – that is the preservation of the old culture and tradition of the people...But they were not enthusiastic supporters of village communities. They did not actually destroy the Sabhā, the Ūr and the Nāḍu...But they did not actually revive these ancient institutions when they ceased to function.[1]

Neglect of these local institutions, according to Krishnaswami, stemmed from the 'feudal' and military organization of the state and the hostility of Vijayanagara soldiers – 'mainly Kaṉṉadiyās and Andhras' – to these institutions; he also blames the 'highly centralized feudalism' of Vijayanagara for the usurpation of formerly self-governing villages and locality institutions. Finally, he attributes the decline of local institutions to what in effect were substitute local institutions, 'the Nāyaṉkara and Āyagār systems'.[2] The latter institution refers to the practice of providing land allotments to village servants.

The divergent interpretations of the impact of Vijayanagara rule of the macro-region on local institutions can be understood quite simply as a difference over whether a powerful state successfully imposed the usage of the northern portions of the macro-region over the southern, Tamil, portion. Implied here is a recognition of the lesser autonomy enjoyed by local institutions in pre-Vijayanagara Karnāṭaka and Andhra

[1] Krishnaswami [384], 102.
[2] Krishnaswami [384], 103.

as compared to Tamil country. However, it must be recognized that locality institutions of Karnāṭaka also underwent significant changes during the Vijayanagara period. This is most clear in the disappearance of references in inscriptions to the ancient numbered territorial units of Karnāṭaka after the conquest of the Hoysaḷas by Bukka I of Vijayanagara in the 1340s. Numerical suffixes for territorial divisions in Karnāṭaka appeared first during the Rāshṭrakūṭa period. These were affixed to great territories, such as the Raṭṭavāḍi 'seven-and-one-half lakh country' and the Gaṅgavāḍi '96,000 country', as well as to quite small *nāḍus*: Dēvaḷige 'seventy' and Iṭṭage 'thirty'. To what these numerical suffixes refer is subject to some disagreement among Karnāṭak historians, but that they probably represent units of ethnically defined territoriality under local chiefs has been recognized. Hence, the disappearance of these numbered units may be taken to mean that older locality institutions in Karnāṭaka were altered just as those of Tamil country were during the Vijayanagara period. On the other hand, the *āyagār* system of ancient Karnāṭaka not only continued to exist there, but became common throughout the macro-region.

The *āyagār* system of the Vijayanagara period is treated by Krishnaswami as having no precedent in Tamil country during earlier times. This suggestion that *āyagārs* were new to Tamil country is implausible, of course. Chōḷa inscriptions refer to elaborate land records and to accountants responsible for these records; these records also refer to headmen. Similarly, there were artisans in the villages of Tamil country during the earlier age as well as persons responsible for the regulation and maintenance of irrigation works. What was new in Tamil country, but perhaps not elsewhere, was the support of these persons and functions by special village tenures. The change from village services carried out within the existing patronage system of the Tamil *nāṭṭārs* of the Chōḷa period appears to signify a change in the character of authority and control in the *nāṭṭār* body, even an end to its corporateness. The *āyagār* system was, after all, a poor system for the maintenance of services of value to an entire village where land was as relatively valuable as it was in the better-developed parts of Tamil country. Clientage services, or even money payments, would have been the expected form. Yet, the *āyagār* system, long prevalent in Karnataka where land was generally less valuable, was introduced into Tamil country during the fifteenth and sixteenth centuries suggesting a shift in the relative power of the dominant landed people and those who performed village services. The inescapable conclusions to be drawn is that the broad locality patron-client system of the *nāṭṭārs* had ceased.

Like the other factors adduced by Krishnaswami to explain the decline of local institutions, the *āyagār* system is seen as an effect of

Vijayanagara state policy, and like some other effects of Vijayanagara policy, largely inadvertent. Along with other Vijayanagara historians, Krishnaswami is really speaking of a new ordering of local social arrangements, and he and others appear loath to recognize that in this new order, the persistence of formerly autonomous *sabhās*, *ūrs*, and *nāḍus* could have no more place in Tamil country than the ancient ethnic territories of Karnāṭaka. However, it is not necessary to accept his notion, or that of others, about 'feudalism', 'centralized' or otherwise, to recognize that a crucial change in the nature of local leadership had occurred between the zenith of Chōḷa authority and the consolidation of the Vijayanagara overlordship in the macro-region by the sixteenth century. It was a change from *nāṭṭār* to *nāyaka* – a change in locality leadership from that of spokesmen for a body of dominant landed folk to that of a chief not only quite independent of the latter but not even of their number at times, a stranger supported by different followers. This new basis of locality leadership altered earlier patron-client relations in a decisive way; it also led to significant changes in the land system of the time.

The Vijayanagara period affords the first view of a land system in the macro-region approximating to that of the early nineteenth century described in British records. In contrast to the ethnically defined corporate groups by whom land income was regularly commanded during the Chōḷa period in Tamil country and the Hoysaḷa period in Karnāṭaka, those who enjoyed specific land rights during Vijayanagara times were not only a diverse body including members of the earlier *nāḍu* population – peasant and Brahman – but also a variety of outsiders; in further contrast with earlier arrangements, it was not the locality, but the village which became the major unit in which land rights were distributed. This shift in organizational locus from the *nāḍu* or *periyanāḍu* or *mahānāḍu*, localities – tracts of hundreds of square miles – to constituent villages, is of the greatest significance in considering the Vijayanagara land system.

The suggestion that this shift was wholly the result of Vijayanagara policies or actions is not supportable, however. The process can first be located in the more advanced parts of the Tamil country during the thirteenth century in connection with temple-centered urbanization, increased trade, and the emergence of more complex forms of localized society requiring more centralized leadership. Complicating this process was the intrusion into all parts of the macro-region – but especially in its less favoured environments – of Telugu warriors as a new intermediary leadership. With the latter came Telugu Brahmans, cultivators, labourers, and mercantile groups. The settlement of many of these Telugu-speaking migrants on black-soil tracts in Tamil country means

that in many places Telugus did not displace Tamils, but utilized lands which the latter had neglected and which Telugus knew and could use well. In other places, Telugus did comprise a new and competitive element, and here the interests of these migrant peoples were best served, as Krishnaswami observed, by discouraging the continued existence of ethnic territoriality to which they must forever be outsiders. The success of these warriors and their followers in establishing stable relationships with local Tamil and Karnāṭaka chiefs is the most persuasive evidence that the earlier forms of ethnic organization had in fact decisively weakened prior to the Vijayanagara period. Thus weakened, the descendants of the ancient *nāṭṭār* of Tamil country and the *okkulu*, their counterpart in ancient Karnāṭaka, were content or compelled by Vijayanagara times to reduce the scope of their control over agrarian resources to quite atomized villages in the localities of their previous dominance.

According to Vijayanagara historians, three major tenurial categories existed in Vijayanagara times. These were: *amara*, *bhandāravāḍa*, and *mānya*; and they refer to the manner in which the shares of income from villages were distributed. The smallest category were *bhandāravāḍa*, or 'crown' villages, some portion of whose income went to support Vijayanagara forts in various parts of the macro-region. A larger number of villages contributed a portion of their output to the support of Brahmans, temples, *maṭhas* or *mānya* (or 'tax-free') villages. The largest portion of villages in the macro-region are regarded by most Vijayanagara historians as falling within the category of *amara* villages allegedly alientated by the Vijayanagara rulers to *amaranāyakas*.

This greatly simplifies what was a complex tenurial system. First of all, rights over village land refers to shares of income, not abstract, legal 'proprietory' rights in land. This share conception applies particularly to the form of tenure called '*amara*'. This tenurial category is treated as a residual category, referring to how the income of some villages was distributed after specific reductions for other purposes (e.g. support of forts and Brahmans) had been made. That is why the category is believed to constitute three-quarters of all villages. The claim upon income from village income by those with local political authority during the Vijayanagara period was theoretically, at least, a limited claim. This is evident from the term *amaramākāni*, a term which is interpreted by most historians to mean 'an estate' or 'a fief' but literally means a 'one-sixteenth share' (*mākāṇi*) to those with local political authority (*amara*). *Amara* tenure does not replace the term used in Tamil inscriptions during the Chōḷa period, *veḷḷān vagai*, which meant 'cultivators' share' and was in fact the category in which all land was regarded unless specifically alienated to other purposes. While the *nāṭṭār*

of the previous period controlled the distribution of income from the land as possessors of the *veḷḷān vagai*, this control did not pass to those with local dominance in the Vijayanagara period. It is more correct to see the various, complex and public rights of persons and categories of persons during this later period as representing a partitioning of the *veḷḷān vagai*, only one part of which passed to those with political dominance.

Other shares of village income went to a group of families whose services benefited the village as a whole. These shares were realized through allotments of fields within the village, an important innovation in Tamil country. Village servants or '*āyagārs*' consisted of twelve or so functionaries of whom three are considered by Krishnaswami and others not to have existed formerly.[1] These three included the headman (e.g. '*maṇiyam*', '*reḍḍi*', or '*gauḍa*'), accountant (e.g. '*karṇam*', '*senābhova*'), and policeman or watchman (e.g. '*talaiyāri*'). To each of these offices a portion of village income was alienated by the recognition of rights in particular plots of village land. Such plots were not liable for regular tax payments, hence they were regarded as '*mānya*', or tax-free, though holders of such plots might be subject to a fixed quit-rent payment. The same method of payment was followed for the remaining village servants who possessed no governance or management functions within a village, but did provide services for the village community. These latter '*āyagāras*' included providers of services important for ritual purity, such as washermen and priests. Others provided goods and services. Among these were leatherworkers whose products included the leather bag used in lift-irrigation devices (*mhote* or *kapila*), potter, blacksmith, carpenter, waterman ('*nīraṇikkār*') who controlled and maintained irrigation channels, and moneylenders. In the nineteenth century, these rights to income shares came under scrutiny as '*mīrāsi*' and '*ināṃ*' rights. During the Vijayanagara period such Persian words were not known or used; instead Dravidian or Sanskrit terms '*umbali*', '*koḍage*', '*srōtriya*' are found. The meanings appear to be the same. They refer to rights of income from agricultural production which were exempt from the customary dues on agricultural income in lieu of direct payments for services. In rare cases there were direct payments for services, payments in kind usually being designated, '*dānyādāya*', those in money, '*suvarṇādāya*' or '*kāśu kaḍamai*'.

More conventional *mānya* rights over land also changed during the Vijayanagara period. Special tenures for individual Brahmans (*ekabhogam*) and groups of Brahmans continued to be granted and protected as were grants to *maṭhas*, including those to non-Brahman Śaiva Siddhānta and Vīraśaiva gurus. There was one significant change in the

[1] Krishnaswami [384], 104; Venkataramanayya [538], 160–8.

pattern of beneficial land rights. This was the great increase in *dēvadāna* grants as compared with all other. Temples during the Vijayanagara period became major landholding and land-managing institutions, and larger temples held hundreds of villages which had been granted to the gods they sheltered. This is to say that temples enjoyed a major portion (*mēlvāram* in Tamil country) of the income of these villages. Special officers of the temples oversaw the management of *dēvadāna* villages to assure that the income endowed by the grant of rights in a village was applied to its specified purpose.

There are only a few temples which have inscriptions which permit anything approaching an accurate assessment of the number of villages they managed and from which they received income at any time, and there are not even tentative estimates of the number of temples which may have been constructed during the Vijayanagara period. One inadequate measure of the latter question, and hence, indirectly, of the former question as well, can be established from the series of 1961 census volumes of Madras (Tamilnadu) state, entitled, *Temples of Madras State* (seven volumes). Madras (Tamilnadu) state conducted a survey of temples enumerating all, or most, of those consecrated temples possessing substantial structural features (and thus dateable by architectural styles) and a more than modest endowment fund. There are many obvious imperfections in these data, yet the resulting enumeration permits a reasonably positive identification of over 2,000 temples whose major structures may have been constructed between about 1300 and 1750. Temples were dedicated to a variety of deities: Śiva, Vishnu, Murugan, Ganeśa, Amman or goddesses, and 'other [mainly tutelary] deities'. Computer analysis of these data indicates that, on the average, every taluk of modern Tamilnadu state, excluding those of Thañjavur, for which no detailed published returns have yet come, had between one and two temples constructed in every century between the fourteenth and eighteenth centuries. There was a clearly increasing rate of temple construction: between 1300 and 1450, the average number of temples built in the sixty-nine taluks for which there are data was 0.5 per taluk; between 1450 and 1550, 0.7 temples per taluk; and between 1550 and 1650, 1.5 temples per taluk. Considering the entire period, the highest number of temples constructed, again on a taluk basis, were concentrated in Koṅgumaṇḍalam (essentially modern Coimbatore district) and in Nāḍuvil-nāḍu (essentially modern South Arcot). Without controlling for the number of taluks (and, again, excepting Thañjavur district), the largest number of temples constructed between 1300 and 1750 – 780 of 2,035 temples – occurred in Pāṇḍimaṇḍalam, the largest of these territories (comprising modern Madurai, Ramanathapuram, Tirunelveli, and Kanya Kumari districts): Koṅgumaṇḍalam

had 517; Tondaimaṇḍalam (Chingleput and North Arcot districts) came next with 406 of the total 2,035 temples; and Nāḍuvil-Nāḍu had 332 of the 2,035 total. Most of these temples can be supposed to have had several *dēvadāna* villages to support their ritual functionaries and to provide the goods (mostly food for offerings) or the money to purchase the goods (mostly aromatic substances and cloths) necessary for ritual performances.

Grants of income and management rights in villages, whether to temples or others, must be seen within the larger context of rural development which occurred in the macro-region during the Vijayanagara period. An increasingly important category of income-share in the land was that which was produced by an investment in irrigation. This was a form of rural entrepreneurship for which there appears to be no precedent in south India. In Tamil country and in Andhra, the tenurial form which resulted from such investment was called '*daśavanda*'; in Karnāṭaka the term was '*kaṭṭu-koḍage*'. Both terms refer to special, private rights, in the form of an income share, derived from the increased productivity yielded by an investment in existing agricultural villages.

Amaranāyakas were among the most active rural entrepreneurs seeking the maximum, protected return on resources they commanded in many parts of the macro-region. In agrarian tracts where productivity could be increased by a relatively modest new construction of or improvement in irrigation facilities, there was scope for agrarian entrepreneurship or, as it might be termed, developmental activity. Such activity seems to have occurred less in the regions of reliable irrigation potential such as in the deltaic tracts of the Krishna river or Kaveri basin, where irrigation construction and maintenance were well established within locality or village clientage systems. In tracts with little or no potential for this scale of developmental activity, such as the dry upland tracts of Rayalaseema or Pudukkottai, there is also little evidence of this kind of activity; here, substantial irrigation development had to await the large-scale works of the nineteenth and twentieth centuries. It was rather in those places of semi-dry cultivation where hydrographic and topographic features were such as to provide the basis for greater productivity and settlement and thus scope for development through investment in small scale irrigation works that this feature of the Vijayanagara period is most evident.

This form of 'developmental investment' was undertaken by individuals of means and local prominence in return for which they secured income rights to a portion of the enhanced productivity as personal and transferable property. This is the meaning of the tenurial forms called '*kaṭṭu-koḍage*' in Karnāṭaka and '*daśavanda*' in Tamil country. Under

these arrangements, it was usually stipulated that a share of increased product from the construction of a tank or channel was to go to the cultivators of the village in which the construction was carried out and a smaller share was to be granted to the person who financed or otherwise executed the construction.[1] A Kannada record from Mulbagal taluk, Kolar district, Mysore, a part of the Gangavāḍi territory, provides an elaborate description of the '*daśavanda*' right. In 1496, a person constructed a tank in a temple (*dēvadāna*) village under an arrangement with the head priest of the Narasimha temple. It was stipulated that the builder of the tank would be entitled to three-tenths of the rice produced on the land watered by the tank and, in addition, the builder was granted some shares of dry-land production of rāgī. From these shares, it was provided that the builder of the tank would be responsible for repairing and maintaining the work under the penalty of being liable for a special payment to the temple should he fail to do so. It was moreover provided that if further irrigation facilities were created in the village by this person, the same arrangement would apply, and that any groves of cocoanut or areca or any permanent gardens were planted, tank water could be utilized as on the rice lands. As a final provision, it was stated that irrigation water for the plots charged with meeting the *daśavanda* shares could be taken only after temple lands had been watered.[2]

Some large temples which held income shares in many villages as *dēvadāna* maintained an irrigation works department for the precise purpose of utilizing money endowments. During the Vijayanagara period, all temples received money gifts to the god and some received large amounts. In the latter case, donors of money were sometimes designated as recipients of a share of the new product created by the irrigation work financed by their endowment. This share was particularly valuable because the crops grown on temple lands provided the ingredients for the food offerings made to the god (*prasādam*) as a part of *bhakti* ritual. *Prasādam* was sold to pilgrims to be carried back to their homes by them and shared with others, in the same manner, and with the same auspicious effect, as Ganges water was and is yet.

The donor's share at the temple of Venkatēśvara, the premier temple of the later Vijayanagara period at Tirupati, was one-fourth of the foodstuffs resulting from a particular investment in a new irrigation facility in a temple village. A typical Tirupati inscription with this provision may be cited. The Tamil record is dated 25 February 1540.

[1] Mahalingam [401], 52. Karnāṭaka inscriptions referring to *kaṭṭu koḍage* grants may be found, among other places, in Mysore, Department of Archaeology [56] *Epigraphia Carnatica*, x, *Inscriptions in the Kolar district*: Kolar taluk: nos. 207, A.D. 1661; 219, A.D. 1663; 220, A.D. 1628; 227, A.D. 1655 (?); Mulbagal taluk: nos. 131, A.D. 1407; 132, A.D. 1494.

[2] *Epigraphia Carnatica* [56], x, Mulbagal, no. 172, 116. The next record, no. 173, dated A.D. 1503 pertains to the same person and temple providing for the share-cropping of the temple lands which the former undertook on approximately half-shares.

Hail, May it be Prosperous! This is the *śilaśāsanam* [order inscribed in stone] executed by the trustees of the Tirumalai temple in favour of Mallappa-Nāyakkar, son of Timmappa-Nāyakkar residing in Nedungunram village on...[date of grant] while Śrīman Mahārājādhirāja Rājaparamēávars Śrī Vīrapratāpa Śrī Vīra Acyutarāya was ruling the kingdom...[:] as you have paid the sum of 656 *rēkhai-pon* [gold coins]...for the purpose of providing four [offerings] daily to Srī Vēṅkaṭēśa...we [the trustees of Tirumalai temple] are authorised to utilize this sum of 656 *rēkhai-pon* for the improvement of the tanks and channels in the temple villages and with the income realised thereby, the above-said...[offerings] shall be prepared and offered daily to Srī Vēṅkatēśa.

You are entitled to receive the quarter share of the offered *prasādam* due to the donor. The balance of the *prasādam* we are authorised to set apart...This practice shall continue to be observed throughout the succession of your descendants till the moon and the sun endure. In the above manner the said stipulations are drawn up by the temple accountant...with the assent of the Śrīvaishṇavas. May the Śrīvaishṇavas protect![1]

While this is a typical record of the late fifteenth- and early sixteenth-century temple complex of the hill shrine at Tirumalai and the shrines at the base of the hill at Tirupati, the temple complex itself is not typical. It was the greatest temple in south India and, considering that Muslim governments dominated most of the rest of the sub-continent, it may have been the greatest temple in India. Indeed, before it reached the peak of its fame in the sixteenth century, 153 festival days were celebrated there accounting for the enormous numbers of pilgrims. Still, other large temples maintained a similar system of productive investment of endowment funds in temple lands. There were at the time few more secure ways for temple authorities to meet the responsibilities incurred in accepting funds for perpetual ritual services, and there were equally few ways in which those persons of wealth, capable of making such endowments, could assure to themselves a more reliable return on some portion of their wealth than could be realized through such things as the sale of *prasādam*.[2] Here, agricultural production and trade were very closely linked.

Most of the evidence which exists on the entrepreneurial activities outlined above relates to temples. Karnāṭaka offers something of an exception. Numerous *kaṭṭu koḍage* rights are preserved on slabs of stone which could be sited anywhere, whereas Tamil inscriptions, almost inevitably, are inscribed on the basements and walls of temple structures. In whatever way these rights of the Vijayanagara period came to be preserved, however, the purpose was to protect the entrepreneurial beneficiary as well as to confer public recognition upon that activity.

[1] Tirumalai-Tirupati Devasthanam Epigraphical Series [46], IV, 264–5.

[2] For a more elaborate description of these matters see: Stein [520], 163–76; [521], 179–87.

Historians of Vijayanagara have pointed out that one of the distinctive features of the age was the importance of reports of foreigners as a source of historical evidence; K. A. Nilakanta Sastri considers this 'cosmopolitanism' especially important in the periodization of south Indian history. Reports of European merchants supplement the older inscriptional and literary sources of south Indian history, but of course most particularly its economic history. In the case of the '*nāyaka* system', these foreign sources provide a discussion of such coherence as to have profoundly affected (if they did not distort) the historiography on south Indian government during the sixteenth century.

The Portuguese trader Fernão Nuniz sojourned in Vijayanagara for about three years during the 1530s, and his report on *nāyakas* provides the foundation of the history of that institution. Nuniz was a horse-trader who, as Paes, a near contemporary, reported was not enjoying particularly good business in south India. Nuniz's report on the horse-trade with Vijayanagara and his descriptions of its warfare draw attention to the dependence upon foreign trade and contact of two of the mainstays of Vijayanagara military strength: its cavalry and its use of firearms. Superior horses and the use of muskets and artillery account for much of the success of the Vijayanagara rulers in containing Muslim power north of the Tungabhadra as well as their success in subjugating Hindu chiefs of the macro-region itself. The Vijayanagara state was not only a 'war-state', but a very successful one for two centuries. This success depended very directly upon its contacts with Portuguese and Muslim traders and soldiers.

Near-perfect agreement exists in the views of foreign trade attributed to Krishnadevarāya or Vijayanagara and the descriptions afforded by foreign traders. According to the *Āmuktamālyada*:

> A king should improve the harbours of his country and so encourage its commerce that horses, elephants, precious gems, sandalwood, pearls, and other articles are freely imported... He should arrange that foreign sailors who land in his country...are looked after in a manner suitable to their nationalities. Make the merchants of distant foreign countries who import elephants and good horses attach to yourself by providing them with villages and decent dwellings in the city, by providing them daily audience, presents and allowing decent profits. Then the articles will never go to your enemies. Give the best horses and elephants only to trusted servants...Keep the horse and elephant stables with care; you should never entrust their management to your subordinates.[1]

On the trade in horses, Nuniz writes:

[1] A. Rangasvami Sarasvati, 'Political Maxims of the Emperor Poet, Krishnadeva Raya', *The Journal of Indian History*, VI (1925), pp. 61–88; portions of this translation are also found in: Sastri and Venkataramanayya [21], III (trans.), 156 and 159, verses 42 and 23.

The King every year buys thirteen thousand horses of Ormuz, and country-breds, of which he chooses the best for his stables, and he gives the rest to his captains...[The king] took them dead or alive at three for a thousand *pardaos*, and of those that died at sea they brought him the tail only, and he paid for it just as if it had been alive.[1]

Descriptions of the trade in horses during the sixteenth century reveal several interesting things. One is that Indian participation in the overseas carrying trade was negligible, if it existed at all. Horses were obtained from Arabia, Syria, and Turkey and transported to several west coast ports by Muslim traders. Goa, under the Portuguese, became a special port for the horse-trade, apparently providing horses to the Deccani sultanates as well as to Vijayanagara. Krishnadevarāya is said to have offered Albuquerque a large payment in return for exclusive control of all horses brought to Goa, but this offer, understandably, was rejected. Given the vital state interest in the supply of good-quality horses, it is curious that the enterprising Krishnadevarāya did not extend the form of state trade in horses to which reference has been made. It may be that his controversial incursions into Kerala were for that purpose, but, if these did occur, they were unsuccessful; the trade in war-horses remained securely in the hands of foreigners. The next best arrangement was therefore to monopolize the distribution by offering the highest prices for horses, even dead ones!

The need for imported horses arose from their superiority over locally bred animals. From Marco Polo onwards, European and Muslim commentators, who often saw much to admire in India, uniformly condemned the quality of locally bred horses and the care of horses. This being true, strong war-horses had to be regularly supplied from beyond India and thus were a premium resource for warriors great and small, a fact which Vijayanagara rulers from the time of Sāḷuva Narasimha, in the fifteenth century, keenly appreciated.

Monopolization of the trade in strong war-mounts had two obvious purposes. One was to assign the best cavalry to the warriors directly under the Vijayanagara rulers, the latter being in all cases field commanders. The perfection of the cavalry arm of Vijayanagara armies had earned for them the title, '*aśvapati*', just as the imperial Gangas of Orissa were known as '*gajapati*', 'lords of the elephants'. Iconographically, this theme is reflected in the striking Viṭṭhalaswami temple begun by Krishnadevarāya in about 1513 at the capital city. Here, instead of the usual panel of elephants found on Hoysaḷa or Pāṇḍyan temples of the time, there is a panel of Portuguese soldiers and their horses. Improved cavalry tactics were undoubtedly learned from the Muslims of the Deccan in whose ranks the founding brothers of the Śaṅgama

[1] Sewell [491], 307, 381.

dynasty had served with other Hindu warriors and against whom the Vijayanagara rulers constantly contended. The second purpose was to provide a resource to lesser chiefs upon whom the Rāyas of Vijayanagara depended in their warfare against Muslims and others; this same enhanced capability of lesser chiefs of course also added to the latter's ability to control their own local bases of power. A regular supply of war-horses from the Vijayanagara kings may therefore have added to the powerful inducements for the recognition by lesser chiefs of the sovereignty of the great kings. With the object of maintaining this monopoly, the Vijayanagara rulers adopted a positive policy of trade in marked contrast to the somewhat reluctant support which is registered in the Mōtupalli grant of the thirteenth century.

A like interest in firearms deepened the Vijayanagara commitment to trade through foreign intermediaries. The use of firearms was a second factor in the success of the Vijayanagara state against enemies within the macro-region and those beyond. Experience with artillery is first reported in the fourteenth century warfare between Bukka I and the Bahmanī sultan Muḥammad I. However imperfect early artillery pieces are known to have been, these weapons and the musket became an important part of Vijayanagara war capability. Firearms may also have contributed to the reliance upon forts in the Vijayanagara politico-military system as it did in the Japanese system at the same time. An increasing number of the Rāyas' soldiers were armed with muskets, and Portuguese gunners were part of Vijayanagara forces in the time of Krishnadevarāya according to Nuniz's description of the Vijayanagara victory at Raichur in 1520. Spoils from that campaign included several hundred heavy and light cannon. Forty years later, the Vijayanagara forces defeated by the Deccan sultanates at Talikōṭa or Rākshasa-Taṅgaḍi were equipped with a large number of heavy artillery pieces according to an allegedly contemporary account.[1] Domingos Paes' description of Krishnadevarāya's court noted that the cavalry troops of the king and their horses were adorned with velvet from Mecca and satins, silks, damasks, and brocades from China; the king's musketeers were similarly dressed. All of this confirms that at the court of Vijayanagara, at least, there were goods brought to this interior city from both coasts of the peninsula.

Whereas the volume, luxury, and strategic importance of imported goods changed very considerably between the thirteenth and fifteenth centuries, the inland commerce of south India appears to have grown in a manner continuous with that of previous centuries. Inscriptions and literary works of the fourteenth to sixteenth centuries refer to over

[1] The *Bakhair of Rāma Rāya*, cited by Saletore [469], I, 417. A translation of this Mackenzie Manuscript is found in: Sastri and Venkataramanayya [21], III, 204–42, especially 224–5.

eighty major trade centres in the macro-region. Many of these towns were temple centres as well as commercial places; other combined administrative functions (i.e. maintained forts) with religious and commercial functions. There were often several bazaars in these towns resulting from the fact that many merchants conducted their business from their residences (from which rents were collected by the town) and these market-places were segregated according to groupings of merchants and artisan-traders handling similar commodities as well as to right and left caste affiliations. An interesting part of the commerce of towns was temple-related trade in consecrated food to pilgrims and the sale of the right to ritual functions and offices in temples.

In Andhra during this period, the largest merchant and artisan organizations associated themselves with particular cities even though they conducted their affairs over a wide region. Reminiscent of the earlier Ayyavole guild organization of itinerant traders, Telugu oil-pressers and merchants identified themselves with the city of Bezwada (in modern Krishna district), Komati merchants with the town of Penugonda (in West Godavari district), and artisans with Pemdota (in Guntur district).

In these Andhra towns and elsewhere, shop and house rents as well as transit duties provided income to be used in a variety of ways. One of these uses was the regular support of temples of the town. A sixteenth-century temple inscription from Kondavidu records the grant of tolls on some sixty articles entering the town, including grains, vegetables, salt, fruit, condiments, oil-seeds, raw cotton, cotton yarn, cloths, gunny bags, and metal tools. In general, temple records of the Vijayanagara period register the growing wealth and prestige of merchant and artisan groups. Their regular contributions to the maintenance of temples augmented the support which came from landed people in the countryside around them; at times of war and other dislocation, the contributions of townsmen became the major sustaining support for temples.

There is considerable comment from foreign traders on the excellence of roads and roadside facilities for travellers between towns or fairs.[1] However, the usual mode of commercial transport continued to be by pack-oxen. Carts are infrequently mentioned and then with reference to short-haul grain transport. Riverine shipping is also mentioned, especially the backwater system on the west coast. Long-distance transport by pack-animals in some places apparently continued to require armed convoys judging from the records of the Vīra Balanja trade community of Andhra. These inscriptions echo some of the heroic language of earlier itinerant merchants.

[1] Summarized by Appadorai [216], I, 425.

However, the conditions of trade – both local and long-distance – had obviously improved over those of earlier times. This improvement reflected the appreciation for the need of and the benefits from trade by the Vijayanagara rulers themselves, but also by local magnates. Without the active participation of the latter, of course, there could have been little of the vigorous town-based trade and none of the important auxiliary trade in regular and periodic fairs. That fairs augmented urban trade is clear from Vijayanagara inscriptions. Regular and periodic fairs were established on the main roads to great temples during the times of major festivals. An example of this occurs in an inscription from the village of Singararayakonda (Ongle taluk, Guntur) at which a periodic fair was held during one of the important festivals at the Tirupati temple. Regular fairs were managed by trade associations of a nearby town and under the direction of the leader of the association, often called its '*paṭṭanaswāmin*'. It is also reported that fairs were convened on orders from local magnates such as the '*gaunda*', or chief, of a *nāḍu* or a '*mahāmaṇḍalēsvara*'.

By the sixteenth century, towns and cities can be seen to have become more fully integrated within the context of south Indian life than they had ever before been. In political terms, changes in the bases of local chieftainship from that of spokesmen (*nāṭṭār*), then leader of the dominant landed group of a locality, and finally to the relatively more independent status '*nāyaka*' was attended by the centralization of administrative functions in fortified, urban places. In social and economic terms, the gap which had once separated rural magnates based on agricultural communities and the mobile economic concerns of many merchant and artisan groups was substantially closed. One legacy of this change was the often violent groping of right and left castes for a new basis of relationship within towns, a feature of south Indian urban life bemusedly reported in the early records of the British. Culturally, towns with their temples, *maṭhas*, and minor courts became the primary focus of learning, ritual, and the arts.

'Vijayanagara' means 'city of victory'; as an historical motif of south India during the fourteenth to sixteenth centuries, it may be construed as something of a 'victory of cities or town-life'. To foreign commentators – themselves examples of increased trade and urban life – the vigour of town life was one of the striking things about Vijayanagara society. This is especially persuasive confirmation of the increased significance of urban life coming as it does from Europeans and Muslims to whom urban society was quite familiar. Yet, notwithstanding this familiarity, these visitors left a record of appreciation, verging upon awe, of the capital city.

Domingos Paes described the city of Vijayanagara in about 1520.

Prior to that, other foreigners had also visited the city and left glowing accounts of it: Nicolo Conti, an Italian in about 1420, and 'Abdu'r Razzāq, a Persian, in about 1440, about a century after the city was founded.[1] A series of masonry walls surrounded the city, and there were several satellite towns, including Nāgalāpūr on the south (modern Hospet town). On the tree-lined road leading to the city were temples erected by imperial grandees, and between the first of the gated walls and the major defensive walls of the city were rice-fields and two large tanks said to be spring-fed. The second walled enclosure contained the city proper with its estimated 100,000 one-storied buildings, the palace complex, several large temples, and several markets. The palace complex included the palace itself, a 'throne platform', an audience building, a guard building, a mint and all were surrounded by a wall which, according to Paes, enclosed a space greater than the castle of Lisbon. A Muslim quarter occupied one corner of this nine-square-mile walled space; many of its occupants served in Krishṇadevarāya's personal guard. Paes writes:

> The size of the city I do not write here, because it cannot be seen from any one spot, but I climbed a hill whence I could see a great part of it; I could not see it all because it lies between several ranges of hills. What I saw from thence seemed to me as large as Rome, and very beautiful to the sight; there are many groves within it, in the gardens of the houses, and many conduits of water which flow into the midst of it, and in places there are lakes...[2]

The grandeur of Vijayanagara is enthusiastically captured in a monograph of the Archaeological Survey of India. The palaces complex, or 'citadel', and adjacent 'octagonal bath' were provided with an elaborate aqueduct system of water supply; the town proper was supplied with channel water from the Tungabhadra and wells. Architecturally, the larger buildings of the 'citadel' were of mixed styles. Several were constructed in what was called 'Indo-Saracenic' style. Bas-reliefs on several of the structures of the 'citadel' area depict scenes of royal audience described in the chronicles of Paes and Nuniz as well as of other court activities: hunting, wrestling, and the celebration of Hindu festivals. A number of the major temples of the city, such as the Hazāra Rāma temple at which Krishnadevarāya worshipped, were good examples of Karnāṭaka temple construction in their external design and their internal decoration. Other temples are built in the 'Jaina' or 'Pallava' style and, in some cases, are believed to be quite ancient structures. Still other temples, such as the Achyutadevarāya

[1] 'Abdu'r Razzāq [72] (1); See: 'The Travels of Nicolo Conti in the East in the Early Part of the Fifteenth Century'; reprinted edn Hakluyt Society, 6. In the same volume 'Abdu'r Razzāq's account is found, 22–43.

[2] Sewell [491], 247–8.

(Krishnadevarāya's successor) temple display stylistic elements said to be of north Indian character, and the Viṭṭhala temple, dedicated to the Maharashtrian deity Vithōba (but never consecrated) and believed by many art historians to be one of the finest temple structures in south India, reflects yet another architectural style.

This city of the Rāyas captures the spirit of the age. It was among the greatest fortresses in an empire whose strength depended upon forts. It was pugnaciously sited at the northern edge of the macro-region which, in this period, was defined by the immediate and intimidating presence of Muslim power. An early twentieth-century student of Vijayanagara archaeology writes:

> What strikes one most about Vijayanagar is the strange and weird aspect of the site. Its general appearance, indeed, is widely different from any expectation one is likely to form on the subject beforehand. Instead of a flat-lying town surrounded by cultivated fields, and intersected by streets regularly laid out, we find the whole site interspersed with groups of bare rocky hills or huge granite boulders, with little vegetation of any sort upon them. The ancient streets, or bāzārs – of which three remain in perfect condition, while traces of others are visible – are placed in the valleys among these hills....The bāzārs...have a large temple situated at one end, three of the most important being the Śrī Pampāpatisvāmi, Kṛṣṇasvāmi and Viṭhalasvāmi temples. The bāzār to which the first-named temple belongs, was a residential one and the most important of all...The others were occupied as shops and consist at present of long colonnades of plain stone piers which once constituted the bāzārs...The outer extent of the seven lines of fortifications was about sixteen miles.[1]

The massive granite rocks of the site provided the excellent building material from which the 'citadel' structures were constructed in an amazing variety of styles: Muslim ('Indo-Saracenic') and a variety of northern and southern Hindu styles. The eclectic and cosmopolitan styles of architecture comprise a lithic realization of the social and cultural aspects of the city and empire. The Vijayanagara state boasted of being the protector of Hindu *varṇāśramadharma* against Islam, yet its primary enemies were Hindu chiefs and kings, and the city accommodated within itself a 'Turushka' quarter, a mosque, and Muslim tombs. It was, in many ways, more like a Muslim capital than a Hindu one in its monumental architecture and in its Muslim soldiery, and also in its very urbanity. No south Indian Hindu state up to that time can be said to have had the profound urban stamp upon it that Vijayanagara had. And, this is not simply the notion of '*nagara*' as cosmological space such as one finds suggested in the Chōḷa capital of Thañjavur, but best represented in the south-east Asian states of an earlier time. Vijayanagara

[1] Archaeological Survey of India [55], 61–2.

was a city of diverse foci – markets, palaces, temples, mosque – a city in which power was more obviously secular than sacred. It was, however, a brittle urban quality, one which could not, or did not, withstand the destruction of the Rāyas either in their capital – which was looted and abandoned in the middle of the sixteenth century – nor in a large number of other towns of the empire. During the late eighteenth century when the first British officials were establishing East India Company control over the conquered districts of south India, town life had again fallen on poor days. Francis Hamilton Buchanan, in his famous *Journey from Madras*... in 1800, reports the sorry state of urban places in the northern Tamil plain and Karnāṭaka. This first generation of British administrators elsewhere report that the towns in which they established their headquarters (and thus resurrected an urban-based empire in south India) suggested little of this earlier vital town-life.

CHAPTER V

THE MARITIME TRADE OF INDIA

A survey of the maritime trade of India during the thirteenth, fourteenth and fifteenth centuries must consider the elements of continuity and change both in these centuries and in the centuries which preceded them. Many of the factors which characterize the trade in late medieval times can also be found in the perhaps more detailed picture which classical authors have provided of the commerce of India with the Roman world. These include its seasonal pattern, dependent on the winds of the monsoons, and the commodities exported from or imported into the Indian sub-continent. Already in Roman times western India and the Coromandel Coast were developing as centres of textile production to be exported across the Arabian Sea. Drugs, spices, the teak-wood of Malabar, precious stones, and a great variety of exotic luxuries passed westwards.

What the Indian market could absorb in exchange for its exports and profits upon transshipments was largely limited to strategic war-animals, spices and medicaments, rarities, toys[1] and exotic textiles for the consuming classes, and base metals for the brass industry. In the fourteenth century large quantities of luxury textiles were imported from the Islamic Near East for the needs of the sultan of Delhi's court.[2] In the correspondence of the fifteenth-century Wazir of the Deccan we even have mention of presents of Frankish cloth.[3] Equally, from the eastern trade Chinese silk was highly esteemed, and Chinese porcelain was used in the kitchens of the Delhi sultan.[4] At the humbler level, represented by the records of the twelfth-century Jewish merchants of the Cairo Geniza, we have mention of the export to India of textiles and clothing, vessels and ornaments of silver, brass, glass and other materials, household goods, and paper (not manufactured in India before the Muslim conquests). Yet these articles were exported in very small quantities, possibly largely for the use of local Jewish households

[1] 'Toys': the term is that of English seventeenth-century traders, embracing works of art and craft, and every variety of exotic novelty; cf. Roe [87] (ed. Foster), 221 *et passim*.

[2] Baranī [140], 311; *Masālik*, 27–8; E & D, III, 383–5.

[3] Gawan [160b], 143.

[4] Smart [516a].

in south India. 'Mostly, gold and silver, in particular Egyptian gold pieces,...accompanied orders for Indian goods, or raw materials for the Indian bronze industry were sent as an equivalent.'[1]

Gold, Bernier observed in the seventeenth century, had been dug out of the mines of all the corners of the earth, was swallowed up and lost when it came to India.[2] Given the structure of Indian society, in which the vast majority of the then less numerous population were at a level of subsistence which did not entail the use of any foreign commodities, the balance of profit could only be absorbed in the form of valuta, whether hoarded or spent in the pursuit of political aggrandizement or social prestige. The complaints of European writers of late Roman times and of the mercantilist era regarding the drain of gold to India find their parallels in the Persian historian Waṣṣaf, who wrote that India exported 'grass and dross' to receive gold in exchange;[3] and in the account by an informant of the Arab geographer al-'Umari as to how the Indians hoarded the gold that came into their country.[4]

In my earlier remarks on currency I have suggested that this pattern may have been temporarily distorted during the early period of Muslim rule and in the expansion to Gujarat and the Deccan in the thirteenth and fourteenth centuries, by the plunder and release of vast accumulated hoards, spent on a military machine for further conquest and further plunder, and for defence against attacks from central Asia; and also in pursuit of medieval Islamic ideals of kingship and largesse.

Evidence of the movement of precious metals in the later fourteenth century is provided by the Broach hoard.[5] The bulk of the gold and silver coins are from the Mamlūk kingdom of Egypt and Syria, with a lesser number from the Rasūlid kingdom of the Yemen. European coins are represented. Very few coins from Iran or the Persian Gulf were found, probably reflecting a less favourable balance of trade from this area exporting war-horses. The only Indian-struck pieces were gold coins from a period when the Sultan of Delhi himself was campaigning in Gujarat. Remittances would pass from the province to the capital as revenue.

Significant developments occurred in the pattern of trade in early medieval centuries in the expansion of maritime activity in the eastern waters of the Indian Ocean and the China Sea. The old silk-route from China through the Tarim basin and the passes of Afghanistan to the ports of western India, which had been a major trade route for commerce with the Roman world, had been cut off; and from the seventh century onwards maritime connections developed between

[1] Goitein [318], 341–2.
[2] Bernier [102], 202, 222; cf. Moreland [421], 184–5.
[3] Waṣṣaf [138], 300.
[4] Shihab al-'Umari [69], 66–8.
[5] Codrington [271b], 'On a hoard of coins found at Broach', 339–70.

China and the Persian Gulf. This trade was originally in the ships of Persian mariners and traders, but Arabs also began to appear in increasing numbers at the great Chinese port of Canton from the eighth century onward.[1] Later, under the Fatimid dynasty of Egypt during the eleventh century, the Red Sea route recovered the importance which it had possessed in Roman times, with Cairo and Alexandria as great entrepôts in the distribution of oriental goods through the Islamic and Mediterranean world. It is a constant feature of this Far Eastern trade, which we shall examine below, that although it was regulated by the Chinese authorities, its conduct was largely in the hands of foreign communities who settled at the Chinese ports. The voyages appear originally to have been made without transshipment of commodities, but they necessarily involved a landfall on the western side of India, and the teak of Malabar provided the most durable wood for the vessels which carried the trade. We lack evidence to show when dhow-type vessels were first constructed upon the Indian coast, rather than with materials exported from it; but this factor, as well as the continuing demand for Indian textiles, spices, and luxuries ensured that a strong connection would develop between the Arab merchants and the Indian coast. Groups of Muslim settlers followed other settlers of western Asian origin, Jews, Christians, and Zoroastrians in the ports of western and southern India. The process had gone on for centuries before our period, but it was growing in momentum.[2]

There was in the preceding centuries another factor which greatly increased maritime activity in eastern waters. This was the emergence of great civilized states in south-east Asia under strong Hindu and Indian Buddhist influence. The material basis of their prosperity was the result of the introduction of Indian techniques of irrigated rice-cultivation.

The presence of Indian traders, and of Indian men of religion as a civilizing force, led not only to a shared common culture, to embassies and to the maritime wars, but also an expansion of the textile trade towards these growing markets, to developments of shipbuilding in southern and eastern India, and the entry of Indian merchants into direct trading with China. We have no evidence of the construction used in the great ships owned by Tamil (Kling) merchants, as we cannot presume that the vessel depicted at Borobudur in the tenth century was such;[3] but there can be no doubt from the evidence of the Chinese sources examined below that in the early twelfth century the major portion of the export trade from China was not in Arab bottoms, but in the ships of the Kling merchants of Coromandel and Ceylon. Shortly

[1] Hourani [370b], 61–78. [2] Howard Smith [515a], 165–77.
[3] Mookerji [414a], frontispiece.

after this they were outclassed by the Chinese oceangoing junks, but the pattern of Far Eastern oceanic trade which they had established, in which the main entrepôts of transshipment of trade-goods between China and the Islamic Near East were in south India, endured until the fifteenth century.

The division of Asian maritime trade into an eastern and a western segment, with a port of transshipment in between, which is a normal feature in the later medieval trade, was favoured by sailing conditions. The ships were dependent on taking advantage of the prevailing winds of the monsoons and avoiding the dangers of storms during passage or at ports or roadsteads. The speed of sail being usually insufficient to traverse the whole distance between the Near East and China during the period of favourable winds and fair weather, this involved either long periods where vessels were at insecure anchorages, or the disembarkation of their trade-goods to await re-embarkation in vessels coming from the opposite direction. The latter was the safer and generally the preferred course.

By 1200 commodities of the maritime trade were mainly carried in two types of vessel, evolved at the eastern and western ends of the trade, and plying almost exclusively within their particular sectors, the 'dhow' and the 'junk'. In addition to these, many varieties of specialized craft were in use, some probably deriving from traditions of shipbuilding of independent historical origin.

The generic term 'dhow' is often stated to be of non-Arab origin and only in recent usage; yet the fifteenth-century Russian, Nikitin, who travelled from the Persian Gulf to India in such a vessel, describes it as a *tava*. These ships of the western sector were rope-sewn, with a mainmast and a mizzenmast rigged fore-and-aft with lateen or, more properly, settee sails. They each had a side rudder. As mentioned above, the hulls of the oceangoing vessels were built of teak-wood from the rain-forests of western India and it may be assumed that by this period they were mostly built there. References to Muslim merchants in western India who owned their own vessels are examined below.[1] The dhows of the Arabian Sea must have been large compared to Mediterranean and north European shipping of the period, though the European travellers remark on the frailty of their construction. However, the flexibility of their rope-sewing enabled them to ride the heavy surf of many Indian roadsteads.[2]

W. H. Moreland has calculated that these vessels were about 125 modern tons draught.[3] A large vessel could carry a cargo of seventy

[1] See below, 152, 156–8.

[2] Polo [75], (ii), 262; Moreland [420a], 64–74, 173–92; Hawkins [364a]; Hourani [370b], 87–105; Nikitin in: Major, ed. [77] (3), 10.

[3] Moreland [421], appendix D; *JRAS*, 1939, 176.

war-horses, plus a hundred warriors, in addition to crew and passengers.[1] They were usually very heavily laden, and some accounts vividly convey the discomforts of maritime travel. 'Abd al-Razzāq, Timurid envoy to Calicut in the mid-fifteenth century, describes his embarkation:

At the end of the monsoon, which is a time when pirates become active, we were given leave to depart (from Hormuz). They divided the people and the horses into two groups, on the plea that they could not be contained in one boat, and put them on the ships and raised the sails, setting off on their course. And when the smell of the boat reached the nostrils of your humble servant, he became in some manner unconscious.[2]

From the sixth century onwards, it is possible that north India suffered a progressive impoverishment on account of the decay of communications in the ancient civilized world and over the land route through Afghanistan. This may be related to the total decline of western trade following the economic and political decline and fall of the Roman empire. On the other hand, it is clear that a rise in the civilized organization represented by Brahmanical Hinduism was taking place in south India at this time.

The Chōḷa kingdom at its height in the early eleventh century was capable both of mounting maritime expeditions against Śrīvijaya and dispatching embassies to China in its own craft. Chinese evidence, discussed below, suggests that at the beginning of the twelfth century much of the eastern carrying-trade was in the 'great ships' of Kling merchants from Coromandel,[3] but that these 'great ships' were outclassed and superseded by the large Chinese oceangoing junks in the middle of the twelfth century.[4] In the twelfth century south Indian Hindu traders had their temples with sculptures by Hindu craftsmen on the south China coast. Yet, possibly as a limitation of the genres of Sanskritic literature, as K. A. Nilakanta Sastri noted regarding the Chōḷa kingdom, almost all our references for Chinese trade to the Indian Ocean and the Arab world are Chinese and Arabic, supplemented from the end of the thirteenth century by European accounts.[5] We should probably accept the opinion of Varthema, whose Indian travels ended before 1508; 'the pagans (Hindus) do not navigate much, but it is the Moors who carry the merchandise'.[6] The fact that in the middle of the fourteenth century the sultans of Madura could contemplate a naval expedition to conquer the Maldive islands and the description by Ibn Baṭṭūṭa of the strong wooden defences of the harbour of Mali-Pattan, suggest that a strong shipbuilding tradition survived on the Coromandel

[1] Ibn Baṭṭūṭa [68], (i), IV, 58–9.
[2] 'Abd al Razzāq [72] (2), 729; Digby [287], 30.
[3] Chau Ju-kua [58], 30–1.
[4] Chau Ju-kua [58], quoting Chou K'ü-Fei, (introduction), 22.
[5] Nilakanta Sastri [480a], 608–10.
[6] Varthema [80], 151.

Coast as well as on the Malabar Coast.[1] At the present day quite large seagoing 'country-craft' are still built on the Coromandel Coast as well as the Malabar Coast, but in design and construction they belong to the Arabian Sea dhow-tradition, modified by European influences.[2]

Moreland excludes the shipping of the Bay of Bengal from his discussion of fifteenth-century craft on the ground that evidence is lacking.[3] If not wholly lacking, it is meagre and insubstantial, but some conclusions may yet be drawn from it. The European authors of the early sixteenth century refer to the junks plying to Malacca, but in this period they could not have been Chinese owned. Ibn Baṭṭūṭa states that junks were only built in south China at Zayton (Ch'uan-chao) and Ṣīn al-Ṣīn (Canton), yet one on which he took ship on his return journey was owned by al-Malik al-Ẓāhir, a Muslim ruler in Sumatra.[4] Another great shipowner in Calicut, Mithqal, had vessels which traded to China. In view of the evidence of the dominant position of Muslim merchants in south China under the late Sung and Yüan dynasties we should assume either that such vessels were commissioned from southern Chinese shipwrights or that possibly at a later period their method of construction was transferred to the Gulf of Bengal or Malacca.

In Bengal the survival of indigenous methods of shipbuilding, as well as the influence of Arabian and possibly Chinese methods of construction, is attested by the great variety of craft and shipbuilding techniques found in a state of decay on the lower Brahmaputra in the twentieth century.[5] A vigorous riverine shipbuilding tradition is attested not only by the Mughal campaigns of the seventeenth century,[6] but also by Ibn Baṭṭūṭa's account of the maritime campaign on the Ganges delta between rival claimants to the sultanate of Bengal at Chittagong (Sudkāwān) and Gaur (Lakhnawati).[7] There is also reference to riverine warfare between the rival mid-fourteenth century sultans at Lakhnawati and Sonargaon or Satgaon. The trade between Bengal and the Maldive islands, based on the exchange of rice and cowries, was probably in Arab-type vessels built of cocoanut-palm wood in the Maldives – a shipbuilding tradition which survived to the twentieth century.

Chinese evidence indicates that there was a maritime shipbuilding tradition in Bengal in the later fourteenth and fifteenth centuries. A vessel from Bengal, probably owned by the Sultan of Bengal, could accommodate three separate tribute missions – from Bengal, Sumatra and Brunei – and was evidently the only vessel plying in those decades in south-east Asian waters which was equal to such a task.[8] It can hardly

[1] Ibn Baṭṭūṭa [68], (iii), 217, 229.
[2] Hawkins [364a], 99.
[3] Moreland [420a], 64–74; 173–92.
[4] Ibn Baṭṭūṭa [68], (iii), 190.
[5] Greenhill [324b], 17–138.
[6] Nathan [154], *passim*.
[7] Ibn Baṭṭūṭa [68], (iii), 236.
[8] Camman [253], 393f; Wang Gung-wu in: Fairbank [296b], 59.

have been smaller than the largest class of Chinese junks, which were no longer faring abroad in the later fifteenth century. This suggests that it was of junk construction. In the mid-fourteenth century Ibn Baṭṭūṭa believed that junks were only constructed on the Chinese coast, but subsequently the shipbuilding technique may have spread. In the early sixteenth century Portuguese writers careful with their nautical terms describe some of the ships of the Bay of Bengal as 'junks', and others as 'after the fashion of Mecca', i.e. dhows.[1]

The trade between the Persian Gulf and China had been almost exclusively in the hands of Persian master mariners in Sasanian times, who continued to play an important part in the eastern sector of this trade in the early centuries after the Islamic conquests. They were, however, joined by the Arabs (Ta-shih of the Chinese accounts = *tāzī*, the Persian term for an Arab), who became the predominant element in the large foreign community settled in the great port of Canton.[2] Later south Indian and Ceylonese shipping came to play an important part, and in 1122 the 'large ships' which came to the Chinese ports of Canton and Zayton (Ch'uan-chao) were those of the Klings.[3] Chinese shipping was familiar in Indonesia by the ninth century, but dramatic increases in the size and range of Chinese oceangoing ships took place in the twelfth century, leading to the transference of most of the oceangoing trade in the China seas and the eastern half of the Indian Ocean into Chinese bottoms.

This development may be directly related to a momentous political event in China. His power encroached upon by the Jurchit Mongols and the Kin rulers, the Sung emperor transferred his capital from K'ai-feng to Hangchow in the south in 1130. He immediately embarked on a programme of economic development and military consolidation of the south of China (Manzi of the medieval travellers). Within a few years he had built a considerable war-fleet, the size of the vessels being a major consideration.[4] In addition he was concerned to develop the economic resources of south China and promote foreign trade. The development may also have been influenced by the use of the compass in navigation, first recorded in Chinese sources in 1119. The result was that both on the inland waterways and over the ocean a larger vessel was used than had hitherto existed in the world's shipping.

The Chinese junk of the thirteenth and fourteenth centuries was technologically the most advanced and seaworthy vessel of its period. There is evidence in Chinese cartography that such vessels had reached the Cape of Good Hope, which was out of range of Arabian Sea shipping because of the frail construction of the vessels. In 1842 a

[1] Barbosa [81] (2), 142, 145: cf. Varthema [80], 210: Pires [112b], (I), 87.

[2] Hourani [370a], 62–3.

[3] Chau Ju-kua [58], intro., 30–1.

[4] Needham [438] (4), 3; 476.

Chinese junk, very much smaller than the great ships of this period, conveying an emissary to England, rounded Cape Horn and berthed in the Thames estuary.[1]

The ancestry of the maritime shipping of most of the rest of the world (other than ancient Egyptian vessels) may be traced back to the dug-out canoe. That of the junk, according to Hornell and Needham, evolved from a bamboo raft. From a flat bottom the sides were built up to a great height, the body of the ship being built of fir or spruce, with double or treble planking held together with huge iron nails. The length of the ship was divided by bulkheads which were watertight; Polo states that they had thirteen bulkheads. While European ships were single-masted and Arabian and Indian ships had a mainmast and a mizzenmast, the larger Chinese junks often had four or five mainmasts which could be dismantled in stormy weather and two or more additional masts which could be set up. The sails were square-set lengths of plaited bamboo matting. Unlike Arab and European shipping of the period, they had a single central rudder.[2]

All travellers are agreed on the very great size of the largest of Chinese junks and this has recently been confirmed by archaeological evidence. That the maximum size was not constant is clear from Polo's statement that formerly the great junks were larger than in his time, and from the discrepancies in the numbers on board recorded by the various travellers. Polo mentions a crew of 200 or 300 mariners, which is clearly not irreconcilable with Odoric's statement that he travelled in a junk with 700 souls aboard. Ibn Baṭṭūṭa mentions a crew of 1,000, 600 sailors and 400 men-at-arms, in addition to the passengers. Jordanus mentions a hundred cabins, Polo fifty or sixty cabins. Ibn Baṭṭūṭa expressed dissatisfaction when offered a cabin without a private latrine.[3] The largest junks plying on the Yangtze river, according to a reckoning of Polo, carried a cargo of 672 modern tons.[4] Depending on whether we take his 'bags' or 'baskets' of pepper to represent the Venetian *carica* or the Indian Ocean *bahār* (which he used in a statement of the daily pepper consumption of the Chinese city of Kinsay) the maximum load of cargo carried by a great oceangoing junk would be 720 tonnes or 1,162 tonnes.[5] If the load of 2,000 *vegetes* ('butts') mentioned by the late fifteenth-century Venetian Nicolo Conti can be equated with sixteenth-century 'tuns', the larger figure could be correct.[6] The rudder of what

[1] Needham [438] (4), 3; 485.

[2] Hornell [370a], 'Primitive types of water-transport in Asia', *JRAS*, 1946, 131; Needham [438], 485.

[3] Polo [75], (ii), 213–4; Yule [76], II, 131; Ibn Baṭṭūṭa [68], (iii), 190; cf. Yule [76], IV, 25–6.

[4] Polo [75], (ii), 181.

[5] Polo [75], (i), II, 286; (ii), 188.

[6] Conti [77] (2), 27; cf. Ma Huan [59], (introduction), 66. Conti, according to his own account, had captained a vessel in eastern waters, Conti [77] (2), 26. Varthema [80], 210, mentions a tunnage of 1,000 'butts'. Mills [59] (introduction) 31, makes a smaller estimate of the largest

has been identified as the flagship of the early fifteenth-century admiral Cheng-ho has been discovered and it indicates a ship of about 500 feet in length.[1]

None of the thirteenth- and fourteenth-century travellers thought of sailing to and from China in other vessels than the junks. Possibly there was a diminution of the maximum size, owing to the hazards of shipwreck, at the close of the thirteenth century, followed by an increase in size in the fourteenth and fifteenth centuries. This was apparently maintained, in spite of the decline of trade in the late fifteenth century. Even in the early nineteenth century, we have a record of a junk of comparable size wrecked in the China Sea.[2]

There can be little doubt that some Chinese junks during the thirteenth century, anticipating the early Ming naval expeditions, made the entire journey from Zayton to the Persian Gulf and the east African coast.[3] Marco Polo, accompanying Mongol princesses from China to Persia, set out in January 1292. Contrary winds delayed the party for five months at Sumatra, where 2,000 men under his command entrenched for five months to defend themselves against the local population, but he does not mention a transshipment to another vessel. After a voyage of twenty-six months with calls at southern and western Indian ports and Hormuz, the princesses and Polo probably reached the coast of the Īlkhān in north-west Persia in March 1294.[4]

Nevertheless by 1175 the common pattern of transshipment of commodities had been set. The Arabian Sea ships sailed to the ports of Malabar and Coromandel, Eli, Quilon, Calicut, Cochin, Kayal, Malipatan, Negapatan, and possibly Motupille. Thence the commodities and passengers of the dhows were exchanged with the junks plying in the eastern Indian Ocean. This may reflect an earlier pattern of transshipment in which the goods were transferred from Arab to Kling bottoms in south India in the eleventh and early twelfth centuries. As Polo's voyage shows, the movement of winds during the monsoons was not always correctly exploited and sailing directions may have been less precise than they were at the end of the fifteenth century, which survive in the manual of the Arab pilot Aḥmad b. Majīd.[5] Though of light draught, such large vessels as the junks were at great hazard in the shallow roadsteads of south India, as Ibn Baṭṭūṭa's account of the shipwreck of the large junk in which he had refused to travel, and the remark of Polo on the reasons for their reduction in size, demonstrate.

size of junk, of 3,100 tons, one almost 300 feet long and 150 feet broad: but this conflicts with the archaeological evidence cited by Needham [438].

[1] Needham [438], (4), 3; 481–2.

[2] Cited by Yule in: Polo [75] (i), II, 252, note 6.

[3] Rashīd al-Dīn, E & D I, 69.

[4] Polo [75], (i), (introduction), liii; Yule [76], (introduction), (1), 86–90.

[5] Tibbetts [530b].

They might be compelled by contrary winds to remain several months at a port of call, but their captains preferred to make a brief stay of only a few days and collect the merchandise which had been warehoused for months pending their arrival.

The development of the great oceangoing junk as the principal vehicle of the eastern carrying trade did not imply a supersession by various national groups of entrepreneurs by other forms. By tradition Chinese distant overseas trade was largely in the hands of foreigners and of those who did not belong to the central Confucian bureaucracy. The south Indian Klings may have been losers, and later evidence of their activities is mainly across the Gulf of Bengal, in Pegu, and in Malacca, where they were one of the powerful extraterritorial communities with a *bendara* in the ruler's council.[1] Zayton (Ch'uan-chou) on the Taiwan strait had largely superseded Canton as the main port of China. From inscriptional evidence a large part of the population consisted of foreigners or partly assimilated communities, some like the Manicheans and Christians with centuries of residence in China who yet maintained separate identities (as was the case with the western Asiatic communities in west and south India).[2]

The large and influential Muslim trading community of Zayton was mainly of alien origin of patrilineal descent, but subject, through Chinese state-policy and incorporative ideals of world-order, to a rapid process of sinification. The foreign traveller like Ibn Baṭṭūṭa was placed under the care of a local resident of his own religion and given Chinese concubines. Ibn Baṭṭūṭa testifies to the great influence wielded by traders from the northern side of the Persian Gulf, but many of the Muslims must also have had links with western India or the ports of Bengal. In the 1440s, after the reversal of the policy of the Ming emperors towards the encouragement of overseas contacts, the sailors of Calicut on the eastern route were known by the Persian slang term of *Chīnī-bachagān*, the 'China boys' or 'sons of the Chinese'.[3] In the official regulation of trade, Muslims also played a large part. The last Sung superintendant of shipping, whose defection to the Mongol Yüan played a large part in the downfall of the dynasty, was a Muslim of Persian or Arab descent. Of his successors under the Yüan, ten out of thirty are recognizably Muslim.[4]

European historians still tend to view the maritime trade of the Indian Ocean from a Europocentric point of view, which is encouraged by the relative strength of the documentation which has survived in European archives. Even for the seventeenth century such a point of view is likely to be unbalanced, from the mere fact of the puny capital resources of

[1] Moreland [421a], 529.
[2] Howard Smith [515b], 167.
[3] 'Abd al-Razzāq [72], (2), 787.
[4] Rossabi [468a].

the European East India Companies compared to those of individual Asian merchants and brokers engaged in regional trade. Before the sixteenth-century growth of the population in Europe such a view is likely to be even more unbalanced. We may bear in mind the view of Marco Polo, normally an acute observer of mercantile matters, that the spice trade of Europe was not a hundredth part of that of China.[1] Ibn Baṯṯūṭa is equally clear that Zayton (Ch'uan-chou) was the greatest harbour in the world, where a hundred first-class junks could anchor with their smaller accompanying vessels.[2] More than in Muslim and Hindu polities, the import of foreign rarities and 'toys' played a symbolic part in the maintenance of the authority of the Chinese régime. The emperor was 'the son of heaven' and possessed the 'mandate of heaven' to rule over the Chinese people and the encircling barbarians of the whole earth. He might on individual occasions be able spectacularly to exercise his authority over very distant areas, as in the kidnap of a would-be ruler of the whole of northern India in the eighth century or of a Sinhalese monarch in the twelfth, to be paraded as an adjunct of the Chinese court. Yet the only manner in which the Chinese emperor could in most cases demonstrate to the populace that he possessed the allegiance of the barbarian world was in the form of 'tribute missions', which were induced partly by the threat of military or maritime expeditions against the rulers and areas concerned; but this consideration was usually less potent than the fact that a very favourable commercial exchange was offered for the import of foreign rarities, above all those which had a value in public display to convey an impression of the emperor's universal sovereignty.[3]

The official concepts of sovereignty of the Chinese emperors according to the Confucian tradition and those of Islamic monarchs might be quite irreconcilable but they were either subtly compromised or suppressed by merchant intermediaries and interpreters, as Fletcher has shown in his study of the relations between the early Ming emperors and Timur and his successors in central Asia. The Chinese authorities were also often disposed to accept 'tribute-missions' with bogus credentials.[4] Equally Indian rulers, with similar but less intense pretensions of authority, were probably inclined to accept the diplomatic fictions involved, with a trade discount for the more extreme position of the Chinese emperor. On these terms the newly established Sultan of Malacca or the rulers of Brunei of the fourteenth and fifteenth centuries were happy, even anxious, to send 'tribute' to China, whose

[1] Polo [75], (ii), 209.

[2] Yule [76], IV, 118–19.

[3] Ma Huan [59], 3–12; Filesi [298a], *passim*; Fairbank [296b], especially 34–62 and 206–16; Hudson in: Richards [465b], 166.

[4] Fletcher in: Fairbank [296b], 206–18.

military support might be an additional counter in their struggles with their neighbours.[1] In India the great Chōḷa kings of Coromandel in the eleventh and twelfth centuries and the petty princes of Malabar in the early fifteenth century were anxious for the connection; and the sultans of Bengal maintained the link by their own shipping at a period when Chinese interest had declined. In the exchanges, the African giraffe sent by the Bengal sultan to the Chinese emperor Yung-lo in 1414 was of much greater ceremonial value at the latter's court, where it created a sensation; and has been thought to be a major motive in the despatch of the great Chinese maritime expeditions which reached the shores of Africa in the early fifteenth century. The Ming emperor Yung-lo, who had usurped the throne from his nephew, had need of such prestige and his power was supported by the eunuch party, largely Muslims from Yunnan like Cheng-ho, the admiral of the expeditions, and Ma-huan, the recorder of the information about foreign parts. The centre of power of the Ming emperors shifted from south to north with the threat of new Mongol invaders, the Oirats – from Nanking to Peking; the eunuchs were supplanted by the mandarins; and as G. F. Hudson remarks, 'in any case after the arrival of the giraffes it seemed that anything else in the way of tribute from abroad could only be an anticlimax'.[2]

In the framework of Chinese diplomacy Ibn Baṭṭūṭa's account of the diplomatic relations between the Delhi sultan Muḥammad bin Tughluq and the Yüan emperor can be reinterpreted. Notwithstanding the Delhi sultan's project of a conquering raid upon the accumulated treasures of China to support the military machine of the Delhi sultanate by a further influx of treasure (news of the disaster may not have reached beyond the Himalayas) an embassy of the Yüan emperor had reached Delhi.[3] Its request, according to Ibn Baṭṭūṭa, had been to rebuild a temple at the foot of the Qarachal (Himalaya) mountains, which the armies of the Delhi sultanate had sacked and destroyed, in an unidentifiable area. Given the Buddhist allegiance of the Yüan and other descendants of Chingiz Khān, it is possible that this was a true interpretation of the object of the mission and that a particular Buddhist shrine formed the basis for this request. On the other hand it could have been an advance of a theoretical claim of Confucian suzerainty, to which there are parallels in the activities of the Ming emperors less than a century later, by sanctifying the mountains and rivers of Annam, Korea, Champa, Malacca, and Brunei.[4] Muḥammad bin Tughluq was not devoid of information about China and his choice of Ibn Baṭṭūṭa as his

1 Camman [253], 393–9.
2 Hudson in: Richards [465b], 166.
3 Ibn Baṭṭūṭa [68], (i), IV, 1–2.
4 Wang Gung-wu in: Fairbank [296b], 53, 57.

ambassador shows judgement of the restless lust for travel of the Moroccan Arab.

The presents sent to Muḥammad bin Tughluq by the Yüan emperor had consisted of a hundred male and a hundred female slaves, five-hundred pieces of brocade, 5 *mans* (64 kg.) of musk, five jewel-studded garments, five gold-embroidered quivers, and five swords. The sultan returned a more lavish present which, however, lacked the exotic novelties which would have been most highly prized at the Chinese court. In the present there were a hundred good horses with trappings, a hundred male and a hundred female slaves 'from among the Indian infidels' (i.e. Hindus) – the latter being all singers and dancers – a hundred pieces each of five varieties of cloth, five-hundred pieces of fine woollen material and a hundred pieces of linen. Other items included a tent and its furnishing, gold and silver vessels, robes and caps, ten quivers, ten swords, and fifteen royal pages.[1]

Of the five varieties of cloth to which Ibn Baṭṭūṭa gives names, four varieties can be identified as fine cottons or muslins probably produced in Bengal, namely *bayramī* (*bhayram*, *bhayron* in other references of this and later periods), *salāhiyya* (elsewhere *silahātī*), *shīrīnbāf*, and *shānbāf*. Only the *juz* silk was a local production, possibly from a royal manufactory. The fine woollens may have been a Himalayan production, from the *tūs* wool of the shawl-goat. The linen was probably an import from western Asia. The list indicates that the capital city of Delhi, situated far away in northern India, itself produced few commodities which entered into the maritime trade of the Indian Ocean.

Ma Huan, himself a Chinese Muslim, can only have come into contact with Muslim merchants and courtiers in Bengal in the early fifteenth century, as he states that all the population there were Muslims(!). He mentions that 'wealthy individuals who build ships and go to foreign countries to trade are quite numerous'. He also mentions the Sultan of Bengal's participations in trade, with a view to dispatching 'tribute' to China. The sultan sent men to travel on board ship and purchase for him 'local products, pearls and precious stones'.[2] As mentioned above, from the evidence of the Ming official history, before the Chinese emperors began their great maritime expeditions, a great ship from Bengal carried not only an embassy from the Sultan of Bengal, but also two other tribute-bearing missions from Sumatra and Brunei.[3]

The *pax mongolica* of the Yüan dynasty was singularly open to foreign influences; and to a considerable degree the Confucian hierarchy was superseded by alien 'barbarian' administrators. The revolt which established the Ming dynasty was a nationalist Chinese reaction, turning

[1] Ibn Baṭṭūṭa [68], (i), 2–3. [2] Ma Huan [59], 160.

[3] See note 53 above; Wang Gung-wu in Fairbank [296b], 59.

to Confucian and traditional ideals of sovereignty. The ideology of the Ming monarchy appears to have affected Indian Ocean trade in three ways.

(1) After the accession to the throne of Yung-lo in 1405, displacing his nephew, the monarchy had great need of conspicuous sources of prestige. Yung-lo depended on the support of the palace eunuchs, who were largely Muslims from such interior regions as Yunnan but who made easy contact with the immigrant maritime Muslim community of Zayton (Ch'uan-chou). Hence the great maritime expeditions of the early fifteenth century were undertaken involving in one case a fleet carrying 27,000 men to bring back the rarities of 'tribute' which would enhance the shaky prestige of the emperor. This probably led to a disruption of regular trade, attested by numerous prohibitions against foreign trading, and an enlargement of the proportion of trade conducted under the guise of 'tribute missions'.[1]

(2) The Mongol concept of universal sovereignty formulated by Chingiz Khān bore the mark of many centuries of Chinese influence. It led to military or naval intervention in the kingdoms of Indo-China, Java, and Ceylon and to the presentation of a diplomatic claim, to the Sultan of Delhi, Muḥammad bin Tughluq. Under the Ming emperor Yung-lo such a claim was more imperative. His support appears to have been decisive in establishing a Muslim ruler, Sultan Iskandar, at Malacca against the declining east Javanese power of Majapahit. This led, with the decline in the direct participation of Chinese-based shipping in overseas trade, to the supersession of the south Indian ports by Malacca as the chief entrepôt, where goods were transshipped en route between the Arabian Sea or Gulf of Bengal to and from the Far East.[2]

(3) In 1434 the great imperial trade missions exploring the shores of the Indian Ocean came to an end. The eunuch-party at court was overthrown by the traditional Confucian bureaucrats. The capital and administrative centre of the country was transferred from the south to Peking. The resources attached to the maritime trade-missions were now reallocated to the task of defending the northern frontiers of China against the barbarians. An ethos hostile to foreign minorities in China and to overseas contacts once more prevailed. The later 'tribute missions' which reached China were not the result of imperial encouragement and pressure, but rather due to the initiative and organization of foreign rulers and merchants anxious to maintain a profitable exchange, not least among them sultans of Bengal. Late fifteenth-century decisions to abandon coastal towns in southern China in the face of Japanese piracy as well as prohibitions against mercantile activity

[1] Filesi [298a] *passim*; Ma Huan [59], (introduction), 1–5.
[2] Wheatley [543a], 306–25.

abroad, though they clearly did not totally inhibit the flow of goods to the Indian Ocean (as the amount of Chinese porcelain from this period which has survived in India, the Maldives, and Middle Eastern countries attests), must have diminished the volume of trade.[1]

Medieval accounts of the traditional trade of Asia lay stress upon exotic luxuries and upon the spice trade in its diversity. In bulk, spices could represent a considerable portion of a ship's cargo. Thus Marco Polo appears to reckon the cargo a Chinese junk could carry in terms of the number of bags or baskets of pepper, in addition to the crew and passengers and their personal effects. A large junk could carry up to 5,000 or 6,000 bags or baskets, and its tenders up to 1,000.[2] If, as seems most likely, Polo was thinking of the *caricas* by which pepper was measured in Venice, and if we take the *carica* at its fifteenth-century standard of about 120 kg., 6,000 bags would represent 720 metric tonnes.[3] If Polo was reckoning by the *bahār* measure of Indian Ocean trade, taking this as Ma Huan's early fifteenth-century reckoning, it would represent 1,462 metric tonnes,[4] though the *bahār* of pepper current at Hormuz in the middle of the sixteenth century was heavier than this.[5] Yet we may accept that, apart from foreign luxuries and 'toys', the principal commodities in demand in China were spices, for which there was a very much greater market than in the westward trade. Therefore it is not improbable that the bulk of the cargo of the junks consisted of pepper and other spices.

On the ships of the Arabian Sea, smaller in size but much more numerous, the distinction between staple commodities and precious luxuries is more clearly evident. It is picturesquely illustrated by Polo's description of the procedure during shipwreck, which was a fairly common occurrence. Valuables were deposited in airtight skin bags, which were lashed to the rafts on which survivors endeavoured to escape; bulky merchandize went down with the ship.[6]

One surviving document provides confirmatory evidence for much that has been inferred from sixteenth-century sources regarding the role of Indian entrepôts in the traditional trade of Asia during the fourteenth century. It is an inventory of luxury goods, said to have been dispatched by the hands of traders of Basra by the Sultan of Delhi 'Alā 'al-Dīn to the Wazir of the Īlkhānid ruler of Persia, Rashīd al-Dīn.[7] It provides a list of commodities mainly either produced in the vicinity of the great ports of Gujarat or transshipped there. Some material in the collection

[1] Filesi [298a], 67–72; Elvin [293], 215–21; cf., for the fifteenth-century situation, see: Fletcher in: Fairbank [296b], 207–17.

[2] Polo [75], (i), II, 250.

[3] Ashtor, in *JRAS*, 1976, p. 35.

[4] Ma Huan [59], 142, note 8.

[5] Hinz [367].

[6] Polo [75], (ii), 283.

[7] Faẓlallāh [2], 281–9.

in which this document is reproduced is clearly unauthentic, but current scholarly opinion would assign the forgeries or alterations to a date before 1400.[1] We cannot therefore take on trust the absolute quantities of the items said to have been dispatched, ranging from diamonds weighing 2.29 and 4.58 g. to 38.52 metric tonnes of teak-wood; but the list provides some guide as to relative quantities. The sources of the commodities are frequently noted.

At the head of the list are textiles, some noted as from Cambay. These are followed by precious stones, perfumes, exotic birds and animals, conserves and pickles, and spices and drugs, the last category totalling 29.25 metric tonnes. Among them is a very early reference to the export of a small quantity of Chinese tea. Furnishings include pillows and quilts, and mats of appliqué leather – a manufacture of Gujarat which Polo also mentions. Next follow fragrant oils, thirteen gold vessels (one described as of Bengal workmanship), 500 vessels of Chinese porcelain, thirty Martaban jars of pickles and four varieties of fruit, including 3,000 coconuts. The list concludes with items of wood and bone, great quantities of teak, ebony, and red sandalwood; and elephant ivory, 'the teeth of the lion-fish', and 'beaks of the *samandar*'. These last two are, with the African zebra and an orang-outang, the most exotic items on the list. They probably refer to walrus ivory, the most likely source for which is Kamchatka; and to the beak of the crested hornbill (*rhinoplex vigil*), found in Borneo, southern Malaya, and Sumatra.

There is no mention of cloth or other manufactures of northern India. Thence must have been carried overland limited quantities of Tibetan musk and possibly a honey-preserve from Kabul. The diamonds would have been supplied by the famous mines of the eastern Deccan, while Ceylon is the most probable source of the rubies and sapphires listed. As well as porcelain, a considerable portion of the drugs, spices, and foodstuffs are listed as coming from China, while other commodities are noted as coming from Java (probably meaning Sumatra) and Macassar. East Africa and Kamchatka, at the extremity of the civilized world in the north-east Pacific, are shown to be within the network of maritime trade.

The fundamental division of Indian maritime trade during this period into eastern and western segments may be further qualified with regard to goods conveyed to or from the more populous and wealthy civilized extremities of China and of the Middle Eastern and Mediterranean markets, the trade towards or from the closer littorals of the Arabian Sea and down southwards to the Horn of Africa and beyond, and to the isles of Indonesia and the coastline of south-east Asia. Of the eastern and western segments, we should perhaps first consider the latter.

[1] Levy [393b], 74–8, argued for a fifteenth-century date of compilation.

Among the exports from China to India numerous references to the esteem accorded to Chinese silk (*cīnāṁśuka*, *abresham*) both before and after the Muslim conquest show that it was a treasured commodity. Chinese brocades were precious, but as in the Roman empire silk was rewoven, in India as well as the Arab World; it was frequently rewoven; with other materials (linen in the Middle East, *mashrūṭ* and fine cotton in India) in the production of local luxury fabrics. China exported, as well as imported, drugs and spices. The commodity list of the *Makātabāt-i Rashīdī* provides examples. Yet another superior technology, that of hard-glaze ceramics, whether porcelain or stoneware, was a Far Eastern, in this period Chinese, monopoly which was not displaced till the eighteenth century. A Chinese source of the twelfth century refers to the overseas vessels leaving with their decks crowded with glazed ceramics, the smaller stacked within the larger and the crevices filled.[1] Coarse large jars with brown glazes, mostly produced in areas under Chinese influence in south-east Asia, known even in the fourteenth century as *Martabānī* or *Martabān* after the port of transshipment in Mergui, were in use in the conveyance of mainly liquid foodstuffs.[2] They were still so employed in the Maldive islands in the 1970s. Enormous examples, which may be several centuries old, are found in Indian shrines.

The import spice trade to China, larger in volume than that to the west, was also different in character, for the reason that many spices, notably cinnamon and ginger, are grown in China itself. The demand for many spices was satisfied from the respective centres of production in the Indonesian archipelago. Those which came from more distant areas were the more eagerly sought for on account of their rarity and exotic appeal. Frankincense and myrrh were imported from south Arabia and the Horn of Africa. Even more eagerly desired was putchuk, which is the principal ingredient in joss-sticks. The thirteenth-century Chinese geographer Chau Ju-kua thought that this also came from Arabia and the Somali coast, as well as from Coromandel. It is in fact the root of a shrub growing only on the southern slopes of the Himalayas and in Kashmir, and his statement may reflect deliberate misinformation by Indian Ocean traders, concerned that the Chinese might find an alternative route of supply through Tibet.[3] Barbosa mentions its shipment from Cambay at the beginning of the sixteenth century and we may assume that at an earlier period it came by the same

[1] Chau Ju-kua [58], (introduction), 31.

[2] Cf. the reference in note 68 above. *Martabānī* in later Urdu came to mean any kind of jar, just as *ṣīniyya*, 'a Chinese porcelain dish', came in later Arabic to mean any kind of tray.

[3] Ju-kua [58], 98, 128, 221; Yule and Burnell [550], s.v. 'putchock'.

coastal route for transshipment into the junks calling at southern Indian ports.

There was a considerable demand for cotton cloths, as cotton was not manufactured on a large scale in China until the fifteenth century. Ibn Baṭṭūṭa noted that fine cotton cloths were rarer and more highly prized than silk in the cities of China.[1] We may conjecture that a large portion of the cottons which reached China came from the three main coastal areas of production which had been exporting overseas since classical times, Gujarat, Coromandel, and Bengal. The cotton cloths of Malabar, Gujarat, Malwa, and Coromandel are mentioned by Chau Ju-kua in the thirteenth century.[2] These regions were outside the itineraries of the Chinese maritime expeditions of the early fifteenth century, but Ma Huan mentions 'five or six varieties of fine stuffs' made in Bengal and gives their names.[3]

Marco Polo and Barbosa testify to the great demand for pepper in China during this medieval period. Polo mentions that a customs officer informed him that the daily consumption of the great city of Kinsay (Hangchow) was forty-three loads, 'each load being equal to 223 lb.' (the calculation is clearly in the *bahār* of Indian Ocean trade).[4] Though pepper was by this period cultivated in Ceylon and Indonesia, it is clear from Chau Ju-kua and Ma Huan that Malabar was the prime source.[5]

The demand for foreign luxury commodities, novelties, and 'toys' among the consuming classes in China was as great as in the Islamic world, but influenced by traditional Chinese taste and ethics. To Chau Ju-kua the diamonds of the Deccan brought by the Persians were of interest because they would scratch jade, and the sapphires and rubies of Ceylon were blue and red stones.[6] The pearls of the Persian Gulf and of the Manar fishery between Tuticorin and Ceylon evoked greater interest, as did fine coral, from the Mediterranean, the Persian Gulf, and the Coromandel Coast.[7] As in India, African ivory was esteemed as a material for carving on account of its superior hardness and fine grain.[8] We notice elsewhere Africans employed as men-at-arms on the great Chinese junks.[9] According to the same source, Ibn Baṭṭūṭa, there was a vogue for black slaves as doorkeepers in the great cities of Yüan China.[10]

There is sparse documentation of the trade between India and Indonesia at this period, but the spices and raw materials of Indonesia

[1] Yule [76], IV, 111.
[2] Chau Ju-kua [58], 88, 92, 93, 98.
[3] Ma Huan [59], 162–3.
[4] Polo [75], (i), II, 286.
[5] Chau Ju-kua [58], 222–3; Ma Huan [59], 135, 143.
[6] Chau Ju-kua [58], 73.
[7] Chau Ju-kua [58], 229–30.
[8] Chau Ju-kua [58], 232.
[9] Ibn Baṭṭūṭa [68], (iii), 190.
[10] Filesi [298a], 21–2.

were an important part of Indian Ocean trade. Many are listed in the fourteenth-century inventory, examined above. Furniture of Macassar sandalwood was in use at the court of the Sultan of Delhi.[1] In Indonesia and particularly in the Malay peninsula these centuries were a period of political instability extending from the downfall of the Srivijaya empire to the establishment of the sultanate of Malacca in the later fifteenth century.[2]

The piracy which was related to political fragmentation in the Malay peninsula was a factor in the establishment of trading settlements in north-east Sumatra, where an increase in pepper cultivation also took place. The trade of these settlements was largely in the hands of Muslim merchants of the Indian Ocean; and, as in south India, trade was accompanied by growing political influence. This led to the establishment of Muslim sultanates, before the beginning of the fourteenth century in the case of Pasé, spreading along the east Sumatran coast to Java and the Malay peninsula. Before the advent of the Portuguese the process of the Islamicization of the Indonesian littoral and thence the interior of the islands and the peninsula was irreversibly established. Yet the major entrepôts for the transshipment of goods towards western Islamic and European markets remained the south Indian ports until the decline of Chinese imperial interest in oceangoing trade and the rise of Malacca.[3]

In view of the references in Indian sources of the fourteenth century to varieties of textiles manufactured in Bengal which were in the sixteenth century staple exports to this area, and of the shipping activity during the fifteenth century for which there is evidence quoted below, as well as the early sixteenth-century descriptions by Barbosa and Pires, we must assume that there was a considerable export during this period of cloth from Bengal for the Indonesian market.[4] Nevertheless, although Chinese oceangoing junks apparently never reached the ports of Gujarat, cultural evidence suggests very strong links between the Indonesian settlements and the dominant Muslim merchants of Gujarat. It was mainly from Gujarat that Muslims came to settle on the Indonesian littoral, and they played a conspicuous role in the spread

1 Ibn Baṭṭūṭa [68], (i), III, p. 251; (iii), p. 667; cf. 'Afif [142], 12, 13, 14. For Cambodian and Malayan aloeswood, and Sumatran benzoin consumed at the Delhi court, cf. Ibn Baṭṭūṭa [68], (i), III, 234–5; (iii), 667.

2 Wang Gung-wu in: Fairbank [296b], 56–8; Wheatley [543b], 306–20; Meilink-Roelofsz [412], 27–35; Simkin [504b], 162–7.

3 The rise of Malacca as a second or sole point of transshipment followed the consolidation of the sultanate there. The process was probably aided by the increasing isolationism of official Ming policy and edicts against direct participation in foreign trade, see Elvin [293], 218–20. Great junks from the Chinese ports no longer were the principal means of transport between south India and south-east Asia; cf. p. 134 above.

4 Barbosa [81], II, 145–7; Tarafdar [527b], 147.

of Islam in the area. At the beginning of the sixteenth century, there were said to be more than a thousand Gujarati Muslim merchants resident in Malacca.[1]

A curious testimony to this is a surviving import of the period, carved gravestones which are clearly the work of Gujarati masons. The most notable of these, standing at Grešik and dated 1419, commemorates a trader, Malik Ibrahim. The main marble slab as well as the carved stone surround and supporting pillars are of Gujarati workmanship – a small monument evidently commissioned to be shipped and erected on a remote site.[2] The accelerating pace of the Islamicization of the Indonesian littoral through trading activities during this period is closely paralleled by the process on the south-east Indian coast, described in a later section of this chapter (pp. 154–6).

Though there is evidence, discussed below (p. 149), of Indian trade with the Horn of Africa, and the communities of the Arabian peninsula were heavily dependent in Indian imports, a large portion of the westerly trade was to more distant markets, particularly to Cairo, at this time the most populous city of the Islamic world,[3] and to Old and the New Hormuz, the great emporium at the mouth of the Persian Gulf, for redistribution to more distant overland markets in Iran, the west, Russia and central Asia. ʻAbd al-Razzāq gives a list of the nationalities of traders resident in Hormuz in the middle of the fifteenth century. He mentions Kalmaks, Chinese from Pekin and south China, Indonesians, Indians (including Hindus) and inhabitants of Aden and Jiddah. Western Asians and Europeans are absent from his list.[4] We have Mandeville's doubtful testimony on the presence of Venetian and Genoese merchants there,[5] but it is likely that the bulk of purchasing by European merchants of goods which passed through Hormuz was done at Baghdad and Tabriz.[6]

Items exported from India to the Cairo market are noted by Goitein in the records of the twelfth-century Jewish merchants trading with India. At he head of the list are spices, aromatics, dyeing and varnishing plants and medicinal herbs. Iron and steel are noted as chief commodities, and numerous references attested that Indian iron and steel retained a high reputation in the Near East throughout the medieval period. These are followed by Indian brass or bronze vessels. The export of textiles appears comparatively limited, and the Jewish merchants are recorded as dispatching a larger number of textiles to India from Egypt than they received there from India. This may reflect the very small scale of the

[1] Pires [112b] (1), 45; quoted in Meilink-Roelofsz [412], with the comment 'probably too high'; Simkin [504b], 163.
[2] Kuhler [385], 356.
[3] Ibn Baṭṭūṭa [68], (i), (2), 41–2.
[4] ʻAbd al-Razzāq [72] (2), 768–9.
[5] Cited in Yule [76], I, 171.
[6] Polo [75], (ii), 26.

transactions of the Jewish merchants whose records have survived as references to Indian textiles are to be found in Arab authors of the same period.[1] The textiles mentioned in the fourteenth-century commodity list discussed above (p. 140), as well as the presence of numerous western Indian textile fragments recovered from the cemetery at Fustat which have been assigned to the fifteenth century, suggest that the coastal production of Gujarat was well organized to meet the needs of western markets.[2]

In the trade towards the western markets, there was usually a transshipment after the journey across the Arabian Sea into the Red Sea or the Persian Gulf, from a heavier to a lighter vessel. This might be avoided, but was a precaution against the navigational hazards of these inland waters. The dues payable to local rulers on the transshipment led the owners of some vessels to attempt the whole course to a port from which the entire consignment might be consigned by overland caravan to the great markets of Cairo and Alexandria.

Navigation in the Red Sea was hazardous for the large but frail ships of the Arabian Sea. Goods destined for the markets of Cairo, Alexandria, and Mediterranean Europe were usually transshipped at Aden into smaller craft.[3] After a further seven days' sail, according to Marco Polo, they were unloaded (probably at Aydhab) and transported by camel to the river Nile and its delta.[4] Polo comments that this was the easiest and shortest route to Alexandria.[5] In the early fifteenth century the customs levied by the Rasūlid sultans of the Yemen became so heavy that an attempt was made to outsail them, and around 1426 the larger vessels began to appear at Jiddah, within the territories of the Bahri Mamluk rulers.[6] Nevertheless at the close of the fifteenth century the course of a Genoese merchant on his passage to India is probably typical, though not identical with the route described by Polo. From Cairo he proceeded to Keneh on the Gulf of Suez, where he embarked in a small craft. This put in every evening at 'very fine but uninhabited ports', reaching Massawa after twenty-five days. After a two months' sojourn there, they sailed another twenty-five days on their course to Aden. At Aden they stayed for four months before embarking on a ship to India. The traveller noted that, like the Red Sea vessels, this was rope-sewn; it differed from them in that its sails were of cotton, not rush-matting. After twenty-five days' sail they sighted islands, evidently the Maldives. Ten days later, with a favourable wind, they reached Calicut.[7]

1 Goitein [318], 339; Serjeant [490a], 216–7.
2 Pfister [446b], *passim*.
3 Ibn Baṭṭūṭa [68], (i), (2), 177–8.
4 Ibn Baṭṭūṭa [68], (i), 1, 109–11; see: Ibn Baṭṭūṭa [68], 68 note.
5 Polo [75], (ii), 282.
6 Al-Maqrīzī [167a] (4), 680–2.
7 Di Santo Stefano in: Major, ed. [77] (5), 3–4.

It has been asserted that the Indian trade through the Persian Gulf during this period was at a low ebb compared to that through the Red Sea: yet there are a number of contrary indications.[1] The Mamluk kingdom embraced Syria as well as Egypt, and at least a portion of the cloths and spices which reached the Cairene or Alexandrian market may have been shipped via Basra or near-by al-Ubulla.[2] Of the two emissaries from the 'Abbasid Caliph in Cairo to Muḥammad bin Tughluq at Delhi, one came via Aden and the other embarked at al-Ubulla. Al-'Umari, whose description of India was written in Egypt, relied largely on information given by a great horse-trader of Bahrayn.[3] When the Sultan of Delhi wished to bring Arabs into his service, he sent a ship to Hormuz and Qatif, not Aden.[4] In the Broach hoard the proportion of gold coins of the Damascus mint is surprisingly high, compared to those of Cairo.[5]

There is also evidence from the places of origin of foreign Muslim merchants in India. Of these a high proportion came from the shores of the Gulf, or from the towns of south Persia.[6] At the close of the thirteenth century the major merchant who negotiated with the Pandya kings of Madura regarding their vital supply of war-horses was Jamal al-Din al-Tibi, who, though of Omani rather than Persian origin, had close connections with the Ilkhānid court. His local importance in Madura is shown by his title of Malik al-Islam.[7] For fiscal purposes the Ilkhanid treasury officials regarded Ma'bar (Madura) as a dependancy of the Gulf province of Shabankara.[8]

Ibn Baṭṭūṭa, in his record of personages encountered on the west coast of India, mentions jurists and men of piety from distant parts of the Islamic world, including Mogadishu and north Africa, but the foreign merchants whose place of origin he mentions are all recognizably from near the coasts of the Gulf, with the exception of Ibn al-Kawlami, who had arrived in Cambay from Delhi and central Asia. The Shāhbandar of Calicut, at whose house Muslim merchants met regularly, was from Bahrayn.[9]

Cargoes despatched to the Persian Gulf destined for Syria were generally transshipped at Hormuz, Kais, or Bahrayn into smaller vessels bound for Basra or al-Ubulla. The rulers of Hormuz controlled Kalhat (Oman) on the southern shore of the gulf and could attempt to close the gulf to the Indian trade. At the end of the thirteenth century they

[1] Ashtor [223], 195, 264–5, and references to articles by Lewis and Aubin there given.
[2] Ibn Baṭṭūṭa [68], (i), 1, 364, 369; (iii), 243, 245.
[3] al-'Umarī [69] 26.
[4] Ibn Baṭṭūṭa [68], (3), 195.
[5] See above, 99, a detailed analysis is in course of publication.
[6] See below, 148–9.
[7] Waṣṣāf [138], 302; cf. Yule [76], III, 33 note.
[8] Māzandarānī [113], 156.
[9] Ibn Baṭṭūṭa [68], (iii), 189; for the office of Shahbandar see: Moreland [421b], 519–33; Yule and Burnell [550], s.v. 'Shabunder'; Meilink-Roelofsz [412], refs. as indexed on p. 462.

stood in a tributary relation to the Ilkhānid rulers of Persia, who derived tribute from the customs at Hormuz and Kais, but they were on occasions in rebellion. At the beginning of the fourteenth century the Sultan of Hormuz, Quṭb al-Din Tahamtan extended his control over both Kais and Bahrayn.[1] Customs at Hormuz are mentioned by several sources as one-tenth of the value of goods in transit.[2]

Sailings from the mouth of the Persian Gulf to India might make a direct crossing of the Arabian Sea. 'Abd al-Razzaq's outward voyage from Kalhat to Calicut, following a two-month delay at Hormuz, lasted eighteen days at the end of the north-east monsoon. His return from Honavur to Kalhat took about six weeks. The vessel needed repair after damage by a storm and he reached Hormuz sixty-five days after he put out from Honavur.[3] Other vessels, e.g. the ships in which Nikitin and Conti travelled,[4] after leaving the gulf, coasted along western India, calling at Cambay and other ports.

Apart from the trade in spices, luxuries, and novelties, a number of staple commodities were prerequisites of the level of civilized life and of the very survival of communities on the Indian Ocean littoral, or of decisive importance in maintaining the balance of power of states with access to the sea. The most significant export of areas bordering on the Persian Gulf was of war-horses, the vital military material by which land-based powers could maintain their military ascendancy. The ancient maritime trade in war-elephants remained of significance until the development of gunnery impaired the force of the elephant in battle. Special trading concessions were given to those who imported war-animals.[5]

Of staple commodities produced in India, teak-wood with its superior virtues for shipbuilding had been used since pre-Islamic times for ships plying in the Persian Gulf and the Arabian Sea. With other woods teak was in demand for pillars, beams and roofing in the almost treeless areas of the Persian Gulf and south Arabia.[6] The export from coastal areas of India of surplus grains – mainly rice – provided a staple food for communities in the Persian Gulf, in south Arabia, and in the Maldive islands. Beneath the Western Ghats such ports as Honavur could not produce sufficient foodstuffs to satisfy their needs, and rice was shipped in the early sixteenth century from Gujarat to provision Calicut.

[1] Burton-Page [246a], (2nd edn), s.v. 'Hurmuz'.
[2] 'Abd al-Razzāq [72] (2), 768.
[3] 'Abd al-Razzāq [72] (2), 780–1, 826, 830; Major, ed. [77] (1), 49, omitted in Shafi''s edition. Cf. Ibn Baṭṭūṭa [68], (i), (2), 199, which mentions a more fortunate voyage from Calicut to Zofar of twenty-eight days; also Di Santo Stefano in: Major, ed. [77], note 99, for a thirty-five-day voyage from Aden to Calicut.
[4] Conti [77] (2), 5; (4), 8.
[5] On the topic of the import of war-animals, see: Digby [287] *passim*, and the references there given.
[6] Warmington [538b], 214.

Gujarat, Coromandel, and Bengal exported cotton cloths and we have the evidence of Ibn Baṭṭūṭa that communities in south Arabia and Oman were entirely dependent on this trade for clothing and staple foods.[1]

The horses brought from Persia were evidently often reared inland. Marco Polo, after describing the provinces of Persia relates: 'In these kingdoms there are many fine horses, and many are carried for sale to India...Some indeed most of them fetch fully two hundred pounds of Touraine apiece...The men of these kingdoms drive the horses...to Kais and Hormuz and to other places on the coast of the Indian sea where they are purchased by those who carry them to India.'[2]

The Ilkhānid court historian Waṣṣāf gives details of the commercial arrangements under which horses were imported into the Pandyan kingdom, which, being in the remote south of India, probably had the greatest need of them all. Malik al-Islam Jamal al-dīn, negotiating both on his own behalf and on behalf of the community of Persian merchants with the Pandyan king Sundara, agreed to dispatch from Kais (Kish) in the Persian Gulf to Ma'bar 1,400 horses 'of his own breed' (probably meaning horses reared on the Persian side of the Gulf). In addition horses were to be procured from 'all the isles of Persia', Katif, Lahsa, Bahrayn, Hormuz, and Kulhatu. The price which had previously been in force, 220 *dīnārs* of red gold for each horse, would continue to be paid; and the Indian king would pay it for all horses lost on the voyage. At the time of the Atabeg Abu Bakr, the historian adds, 10,000 horses were exported annually to Ma'bar, Kambayat (Cambay), and other western Indian ports: and 2,200,000 *dīnārs* were paid for them out of the Hindu temple revenues and the tax upon courtesans attached to the temples.[3] Waṣṣāf and Marco Polo both comment upon the effect of the mishandling and unsuitable diet given to the imported horses in south India. Polo maliciously adds that the merchants of the Gulf refused to let any horse-doctor travel to Ma'bar to teach the inhabitants better 'because they are too glad to let them die at the King's charge.' Waṣṣāf remarks, 'there is therefore a constant necessity of getting new horses annually and consequently the merchants of Islamic countries bring them to Ma'bar'.[4]

On the south side of the Persian Gulf and along the coast of the Hadramawt almost every port of consequence seems to have been engaged in exporting horses to India, which were collected from the Arabian hinterland. *Shāmī* or Syrian horses are mentioned a number of times by writers of the Delhi sultanate,[5] which perhaps indicates the western periphery to which the demands of the seaborne horse-trade

[1] Ibn Baṭṭūṭa [68] (i), II, 196, 198, 225.
[2] Polo [75] (i), (1), 83; (ii), 30.
[3] Waṣṣāf [138], 302.
[4] Polo [75] (ii), 237; Waṣṣāf [138], 302.
[5] Amīr Khusrav [137], 163.

reached. Al-'Umari mentions horses coming from Yemen and Iraq which were exported to India, and the particularly high prices which were paid for the Iraqi horses.

Al-'Umari also emphasizes the importance of Bahrayn as an entrepôt and mentions the name of a great merchant, 'one of the *amirs* of Bahrayn', 'Ali bin Mansur al-'Uqayli, who was engaged in exporting horses to the Sultan of Delhi. He commented on the discrimination of the people of the Delhi sultanate with regard to buying horses and on the great prices which they were prepared to pay for them.[1] Polo's observations on the main Arabian ports, Kulhat (near Muscat), Zofar, al-Shihr, and Aden all mention the export of 'innumerable fine chargers and pack-horses of great worth and price' to India, on which the merchants are said to have made a handsome profit.[2] Before the coming of the Portuguese the profits of the Indian horse-trade were important in the internal economy of south Arabia.

Evidence of trade between western India and the east African coast, though not plentiful, at least suggests that this commerce was well established. As in later time, the main surviving evidence of the trade was in the presence and activities of east African slaves in south Asia.[3] A *Ḥabashī*, presumably originally a slave, was the founder of a mosque in the Indian capital of the Ghaznavids, Lahore, in the twelfth century;[4] and another provoked the opposition of the Turkish slave-aristocracy by his promotion under Sultan Raziyya (1236–40) at Delhi. In the later fourteenth century the Delhi Sultan Fīrūz Shah Tughluq granted the tax-farm of the province of Gujarat to Shams Damghani on the condition *inter alia* that he should remit annually from there 400 choice *Ḥabashī* slaves.[5] At the beginning of the same century Amir Khusraw, resident at Delhi, in his list of choice commodities from overseas, had been able to distinguish between *Ḥabashīs* and *Zangīs*, i.e. slaves transported from the Horn of Africa and those from Zanzibar and the adjacent east African littoral.[6] We note elsewhere *Ḥabashīs* employed as men-at-arms on vessels plying down the western Indian coast and even on Chinese junks; there is evidence that this employment dated back to pre-Islamic times.[7] The capacity of the *Ḥabashīs* in maritime warfare survived to later times in the employment of the Sidis of Janjira as 'admirals' of the seventeenth-century Mughal rulers, down to the late nineteenth century, when 'Seedees' were commonly employed as stokers on the steamships of the Indian Ocean.

[1] al-'Umarī [69], 21, 28.
[2] Polo [75], (i), (2), 438, 442, 444, 450; (ii), 282–5.
[3] Burton-Page [246], (2nd edn), s.v. 'Ḥabashī (India)'.
[4] Fakhr-i Mudabbir [121], 390.
[5] Sihrindī [145], 124; trans. Basu, 139.
[6] Khusrav [139b], (4), 142–3.
[7] For the role of Azumites/Abyssinians in the maritime trade, see: Warmington [538b], 13, 321 *et passim*; *Periplus* [74a]; Hourani [370c], 39, 42–3.

In the fifteenth century African slaves became a prominent element in the military and administrative machines of the sultanates of the Deccan, Bengal, and Gujarat. In north India before the end of the fourteenth century they were not of equal prominence, though possibly the dynasty of the sultans of Jaunpur, founded at the end of this period, were the descendants of African slaves brought over in the later fourteenth century.[1]

Of the flora imported to India through the centuries, the baobab tree of east Africa with its striking appearance must surely date from this period. It flourished at the fifteenth and sixteenth-century Muslim capitals of Mandu and Bijapur. It has been argued that its importation reflects the survival of a non-Muslim cult among east Africans brought to India.[2]

Among rarities and 'toys' exotic fauna have always been of the greatest interest in the civilized world. It has been argued that the African giraffe which arrived at the Chinese court in 1414, as a present from the Sultan of Bengal, was a major motive in the dispatch of the great Chinese maritime expedition of 1417–19 which reached the eastern shores of Africa. A giraffe is also recorded among the presents of the Bahmani sultan of the Deccan to the Ottoman sultan in the late fifteenth century. A zebra, which must have reached western India from the Horn of Africa, is among the presents alleged to have been sent by the Delhi sultan 'Ala al-Din Khaljī to the Ilkhānid *wazir* Rashid al-Din, a predecessor of those unfortunate animals sent during the seventeenth century to the Mughal emperors Jahangir and Aurangzeb.[3]

The received historical picture of the distortion of Indian Ocean trade in the sixteenth century following the arrival of the Portuguese and their bid for armed control of the sea routes has been modified by recent scholarship. This has tended to show the Portuguese competing with only qualified success for a share of the country trade and indeed reaching accommodations with other holders of power as to how large that share should be. The Portuguese role in the diffusion of gunnery in eastern waters can also be regarded as fortuitous. In the decades immediately before the arrival of Vasco da Gama a knowledge of firearms was spreading around the Indian Ocean and in the isles of Indonesia. Muskets were borne by Gujarati soldiers probably as early as 1475.[4] In the 1520s the great Mapilla merchant Mamalli of Cannanore

[1] Burton-Page [246a] (2nd edn), s.v. 'Ḥabashī'.

[2] Burton-Page [246b].

[3] See above, 136; Filesi [298a], 29–30; Faẓlallāh [2], 284; I. Stchoukine [518b], plate XXVII; Bernier [102], 135, 144.

[4] Meilink-Roelofsz [412], 123, quoting Eredin on the fall of Malacca in 1511; Varthema [80], 254 n.; Barbosa [81], II, 193. Muskets are depicted in a Gujarati manuscript assigned to *c.* 1475, see: Khandalavala and Chandra [194b], 30 and fig. 16. Cannon are depicted in a north Indian MS of 1516. References which have been adduced to the employment of firearms in

was supplying the King of Kotte in Ceylon with cannon.[1] The historical situation which the Portuguese prevented was a probable further expansion of Islamic influence and Islamic maritime states in south-west India below the Western Ghats. Portuguese hostility did not eliminate, but limited, the power of such emergent dynasties as the Alirajas or sultans of Cannanore and the Sidis of Janjira.[2]

Bearing this interpretation of the later situation in mind, the evidence of the relation between trade and maritime power on the eastern side of the Arabian Sea in the fourteenth century, largely provided by the Arab traveller Ibn Baṭṭūṭa, shows a period of instability, in which the wealth and influence of Muslim traders were growing in most of the settlements of the western Indian coast.

Communities of western Asian origin had been settled for many centuries along the western Indian coast and in the south of India. Those from the Persian Gulf were in a particularly influential position and as early as the first century A.D. enjoyed certain extraterritorial privileges. Muslim communities from the Persian Gulf were established in the eighth and ninth centuries in western and southern India, as in China. The conversion of an ancestor of the Kolathiri royal houses of Malabar, Cheruman Perumal, to Islam during the days of the Prophet is certainly legendary, the purpose of the tale being to legitimate the close proximity of Muslims to these rulers which might otherwise be thought to bring defilement.[3] The earliest surviving mosque in southern India, dated 1124, is found in the old palace-precinct of the Kolathiri rulers of Eli.[4]

The expansion of Muslim maritime influence was a process independent of the encroachment on south Asia of Muslim arms, the conquest of Sind in the eighth century, the Ghaznavid raids and kingdom of Lahore, and the great Muslim expansion of the late twelfth and thirteenth centuries. It is a continuous process of growing momentum, though individual settlements in south India suffered setbacks with the rise of the Hindu power of Vijayanagara in the late fourteenth and fifteenth centuries.

The contrast of the peaceful spread of Islam by trade with the Muslim military conquests has been drawn by Sir Thomas Arnold in *The Preaching of Islam* (London, 1896) and by many writers following him. Nevertheless the Muslim merchants were in a position of economic and

fourteenth-century India are either anachronistic or of uncertain interpretation. The process of the diffusion of gunnery in the Indian Ocean was undoubtedly accelerated by the challenge of the Portuguese (see note 1 below), but was aided not only by European renegades, but also, in the sixteenth century, by Ottoman imperial policy and Rūmī gunfounders – see: Inalcik, 'The socio-political effects of the diffusion of fire-arms in the Middle East', in: Parry and Yapp [444b], 202–11.

[1] Varthema [80], 193, is clear that firearms were not in use in Malabar at the time of the arrival of the Portuguese; see Bouchon [236b], 168.

[2] Bouchon [236b], 169–82.

[3] Friedmann [303b], 233–58.

[4] Bouchon [236b], 10.

strategic strength, from the great fortunes sometimes accumulated by individual merchants, from the armed character of trade to combat the endemic piracy and the exactions of local rulers, and from their control of vital military matériel, war-horses. This frequently led to direct involvement in struggles for political power. From Ibn Baṯṯūṭa we learn of the chief of the traders in Cambay engaging in a project to repopulate the strategic island of Perim at the mouth of the Gulf of Cambay.[1] Before the conquest of Gujarat by the Delhi sultan, armed conflict had broken out between Vastupāla, the minister of the Chaulukya ruler, and a Muslim merchant called Saida, who called in the son of the ruler of Lāṭa (southern Gujarat).[2] In the Pandya kingdom of the extreme south, the Tibi family, referred to above, played the role of kingmakers between Sundara Pandya and his brother Vīra at the close of the thirteenth century.[3]

The fourteenth century trade along the western Indian coast, as well as in other eastern waters, had a highly armed character. When Ibn Baṯṯūṭa departed from Gandhar at the mouth of the Gulf of Cambay, he sailed in a flotilla of four vessels. Three were ordinary ships of the Arabian Sea, though possibly of more than the ordinary tonnage. The ship on which Ibn Baṯṯūṭa travelled had on board fifty archers and fifty Abyssinian soldiers. These Abyssinians are described by him as 'the lords of the sea' and were evidently swordsmen and spearmen. Of the archers Ibn Baṯṯūṭa mentions one who was an Iraqi.[4] The employment of bands of archers on board ships sailing on the western Indian coast had been noted as early as the second century A.D. by the Roman author Pliny.[5] The fourth vessel of Ibn Baṯṯūṭa's flotilla was a large grab of a type known as '*uqayrī*. It was a war-vessel, 'in time of war covered with a roof so that the rowers [60 in number] should be struck neither by an arrow nor by a stone [from a catapult]'.[6] Later, in describing the attack by the Muslim ruler of Honavur (Hinnawr) on his northern neighbour at Sandapur (Goa), in which the traveller himself participated, he mentions a war-fleet of fifty-two vessels, including two of a type of landing craft with open stern, from inside which armoured knights could ride out to the assault. Catapults were used from the shore and possibly from vessels.[7]

The great Chinese junks which sailed to Calicut and Quilon were also highly armed. Out of a crew of 1,000, 600 were sailors and 400 warriors – 'archers, shield-bearers and crossbow archers, that is the

[1] Ibn Baṯṯūṭa [68], (iii), 196.
[2] Gopal [323], 196.
[3] See above, 33, 36, 106, 117, 118, 146, 148; Yule [76], III, 33 n.; Polo [75], (i), (2), 386 and 4 n.; Krishnaswami Aiyangar [383b], 69–73; Waṣṣāf [138], 300–3, trans. E & D (3), 32–5.
[4] Ibn Baṯṯūṭa [68], (iii), 176.
[5] Pliny, cited in *Periplus* [74a], 232 n.
[6] Ibn Baṯṯūṭa [68] (3), 176.
[7] Ibn Baṯṯūṭa [68] (3), 195.

people who shoot naphtha missiles'. A portion of the armed men on the junk upon which Ibn Baṭṭūṭa travelled were also described by him as *Ḥabashīs* (Abyssinians).[1]

Most local rulers claimed possession of salvage from vessels wrecked on their coast, as well as the confiscation of cargoes laden for other destinations.[2] Some promoted piracy on ships which did not call at their ports.

Piracy along the western coast had been a major factor affecting Indian trade since the time when the Romans first became aware of the operation of the monsoons.[3] It was not completely suppressed till the nineteenth century. The relationship between maritime merchants and predatory settlements shows a degree of organization and of generally accepted customs of the sea which provided a background for the Portuguese *cartaz* or licence system of the sixteenth century, directed from Goa on the same coast.

On Polo's testimony, at the close of the thirteenth century there was little piracy from the Indus delta, Kathiawar, the Makran coast or the Gulf of Cambay; the Indus delta had been infested with Indian pirates sailing on the *bawārij* in the early centuries of Islam.[4] Piratical activities of the thirteenth and fourteenth centuries were, as in Roman times, conducted from the ports of Konkan, Kanara, and the north of Malabar, i.e. the infertile area of the western coast strategically situated between the manufacturing area of Gujarat and the rich pepper-growing area of Malabar.

The rulers and inhabitants of this less fertile stretch of coast could procure a share in the lucrative coastal and overseas trade which passed close to it by participation as sailors, shipowners (and by implication shipbuilders), or by the extortion of a share of the commodities without exchange, in the forms of customs, confiscation of cargoes unintentionally landed or wrecked on their shores, or attack by ships of war. 'This naughty custom prevails all over these provinces of India, to wit, that if a ship be driven by stress of weather into some other port than that to which it was bound, it is sure to be plundered. But if a ship come bound originally to the place they receive it with all honour and give it due protection.'[5] The custom extended to the ports of the rich pepper-growing area of Malabar with the exception of Calicut, whose rulers sought to attract trade by not applying it; the ruler of Calicut also did not confiscate wrecks.[6] In the late seventeenth century

[1] Ibn Baṭṭūṭa [68] (3), 190.

[2] The exception of the Samori of Calicut, and the abolition of these customs by the Kākaṭiya rulers of the Coromandel Coast in the thirteenth century are examined below. For the general practice see: Polo [75], (i), (2), 386 and 388 n.; (ii), 264.

[3] Warmington [539b], 113; *Periplus* [74a], 202–3.

[4] Hourani [370a], 70.

[5] Polo [75], (i), (2), 386.

[6] Ibn Baṭṭūṭa [68] (3), 192; 'Abd al-Razzāq [72] (2), 781–2, trans. in Major, ed. [77], (1), 14.

Shivājī argued to the English that seizure of vessels off-course was the 'law of the Konkan'.[1] That the same customs obtained on the eastern coast of India is evident from the early thirteenth-century pillar inscription of the Kākatiya ruler Gaṇapatideva at the port of Motupalli, which abolished them.[2] Equally the ruler of a port could through his warships compel a merchant vessel to put into a port controlled by him, to pay customs as in one of the cases discussed below; or a fleet of corsairs, controlled by or operating under the protection of such a ruler, could attack merchant vessels on the high seas. The vicissitudes of fortune which medieval merchants survived were often very great, and it is clear from numerous accounts that it was the general practice neither to kill nor enslave the traveller who was thus despoiled of his goods; he might live to bring them more on a subsequent occasion.[3]

Polo called the pirates of western India 'the most arrant corsairs of the world'.[4] He describes a well organized fleet of corsairs, twenty or thirty ships, strung out along the coast with five or six miles between one ship and the next. Signal was given of the sighting of an approaching vessel by lighting a fire, at which the corsairs gathered to attack. They could intercept shipping over a range of about a hundred miles.[5] Such an extended manoeuvre may have been designed to catch vessels sailing across the Arabian Sea to Mount Eli or another landfall. The activities of the western Indian pirates extended, as had those of Indian pirates in previous centuries, to the isle of Socotra off the Horn of Africa.[6] In Socotra a market was held of the commodities which they had extracted, which were recycled there into the mainstream of Asian trade.

Three situations on the west coast of India during this period may serve to show the interrelation between armed power, maritime supply and trade, and the expansion of Muslim influence.

(1) The Hindu ruler of Thana during the late thirteenth century, according to Polo, allowed corsairs to operate from his harbour on the condition that all horses captured from the trading vessels should be surrendered to him, thereby enabling him to maintain his military power on land.[7] His kingdom did not survive, as Thana was brought under the administration of a Muslim governor, representing the Sultan of Delhi, at some time early in the fourteenth century.[8]

(2) The ruler of Bacanore (Fakanor) in Canara in Ibn Baṭṭūṭa's time was a Hindu, but his fleet was commanded by a Muslim called Lu'lu' ('Pearl'), denounced by Ibn Baṭṭūṭa as a pirate. He had twenty warships,

[1] Fryer [107], 261.
[2] *Epigraphia Indica*, XII, 195; Gopal [323], 146; Krishnaswami Aiyangar [383b], 70.
[3] Polo [75], (ii), 264; Ibn Baṭṭūṭa [68], (iii), 232.
[4] Polo [75], (i), II, 389; (ii), 264.
[5] Polo [75], loc. cit.; (ii), 264.
[6] Polo [75], (ii), 272.
[7] Polo [75], (ii), 266.
[8] Odoric in Yule [76] (2), 117–28.

which induced vessels on the coastal trade, including the heavily armed flotilla of four vessels on which Ibn Baṭṭūṭa and his imperial embassy had embarked, to call at Bacanore and pay customs. Other ships might ignore the Bacanore chieftain's demands at their peril, including the vessel in which Ibn Baṭṭūṭa subsequently travelled northwards, which was boarded by the war-vessels; the passengers were plundered of all their assets, but left alive and at liberty.[1]

(3) The case of Jamal al-Din, Sultan of Honavur (Hinnawr) shows best the close links between maritime trade, piracy, and political power along the coast. His father, Hasan, was a shipowner, the builder of the congregational mosque at Sandapur (Goa).[2] He or his son had been ousted from Sandapur by a local Hindu chieftain, who may have been from the family which ruled there at the time when Hasan established his influence. By the time when Ibn Baṭṭūṭa travelled down the coast, Jamal al-Din had established himself as ruler of the ancient port of Honavur, roughly half-way between Goa (Sandapur) and Mangalore to the south. Honavur had little cultivable land. The inhabitants were dependent on imported foodstuffs. They were Muslims and made their livelihood as sailors.[3]

Sultan Jamal al-Din clearly maintained close relations with the Muslim merchants of the ports of south India. He had reason to fear the kingdom of Vijayanagara, the rising Hindu power of the interior. He paid tribute to the Vijayanagara ruler Hariappa (Harihara I).[4] At the same time he extracted tribute from the ports of Malabar, under threat of maritime invasion by his army of 6,000 fighting-men. He was concerned to recover control over Sandapur, where his intervention was sought by one of the contenders in a dynastic quarrel of the Hindu ruling house. The latter offered to turn Muslim and contract a marital alliance with Jamal al-Din. Ibn Baṭṭūṭa participated in the seaborne invasion of Sandapur, to which Jamal al-Din brought a fleet of fifty-two vessels. The assault was successful, but Ibn Baṭṭūṭa implies that it was followed by reverses.[5] When, at the beginning of the sixteenth century, European observers recorded the political situation at Honavur, the port was controlled by two men with recognizably Canarese names who were probably tributaries of the Vijayanagara kingdom. Some evidence suggests that the Muslim community of Honavur was exterminated by a raid of the Hindu ruler of Vijayanagara in 1427.[6]

Very large individual fortunes were accumulated by Muslim traders,

[1] Ibn Baṭṭūṭa [68], (iii), 184, 232.
[2] Ibn Baṭṭūṭa [68], (iii), 177.
[3] Ibn Baṭṭūṭa [68], (iii), 179–81, 195.
[4] Ibn Baṭṭūṭa [68], (iii), p. 180; Sewell [491], 6–7.
[5] Ibn Baṭṭūṭa [68], (iii), 195–7.
[6] D'Souza, *The Nāvayat of Canara*, Dharwar, 1955, pp. 36–41, 49–50, quoted in Bouchon [236b]; Barbosa [81], 157 and note with references in other Portuguese sources to this family.

who were shipowners and often wielded extensive political power and influence. According to Conti, writing about traders in Coromandel at the close of the fifteenth century who by his indications were Muslims, 'the merchants [are] very rich, so much so that some will carry on their business in forty of their own ships, each of which is valued at 50,000 gold pieces'.[1]

Perhaps the most sensational of all mercantile careers of which we have record has been resurrected from the Portuguese archives, that of Mamalli of Cannanore in the first three decades of the sixteenth century. From a family of leaders of the Mapilla community of Eli and Cannanore, Mamalli established a tutelage over the sultans of the Maldives and had a monopoly over the supply of the vital shipbuilding commodity of coir. In the period of his life of which we have record he was engaged in unremitting hostilities against the Portuguese, on various occasions summoning troops from Calicut to besiege their *feitoria* at Cannanore and a flotilla of warships from Gujarat against their newly established *feitoria* in the Maldives; and supplying the King of Kotte in Ceylon with cannon to withstand their attacks. He may have organized the series of outbreaks against the Portuguese in 1516–17 through the breadth of their settlements from Hormuz to Macao, though substantiating evidence is lacking.[2]

A more typical example of the international and quasi-political activities of a large-scale Muslim entrepreneur is furnished by Ibn Baṭṭūṭa's references to the activities of Taj al-Din ibn al-Kawlamī. The *nisba* al-Kawlamī indicates a paternal connection with the port of Quilon on the Kerala coast. As he had also built a madrasa in Alexandria, it is possible that he was by origin an Egyptian Kārimī merchant trading to south India. Yet he arrived at Sultan Muḥammad bin Tughluq's court by the overland route 'from the lands of the Turks, with magnificent gifts, including *mamlūks*, camels, merchandize, and woven stuffs'. For these the sultan gave him 12 *lakhs* (of silver *ṭankas*) and appointed him governor of Cambay. From there Ibn al-Kawlami sent ships to Malabar, Ceylon and elsewhere, and he 'became enormously wealthy'.[3]

According to Ibn Baṭṭūṭa, 'the majority of the inhabitants' of Cambay were foreign merchants. The *Malik al-tujjār* or chief of the merchants at Cambay – the title was probably an honorific from the Delhi sultan implying pre-eminence throughout his domains – was from Kazarun, close to the route from the Persian Gulf to Tabriz and the Black Sea. Ibn Baṭṭūṭa on several occasions mentions remittances from India as well as China to the Sufi shrine at Kazarun. Another

[1] Conti [77] (2), 21.
[2] Bouchon [236b], *passim*; for an English summary of contents, see *BSOAS*, XXXIX, 1976, 191–3.
[3] Ibn Baṭṭūṭa [68], (i), III, 869–72; (iii), 116.

notable merchant of Cambay was from Gilan on the Caspian Sea and a third was an alleged descendant of the 'Abbasid caliphs who was a wealthy merchant of Baghdad. Ibn Baṯṯūṯa had also met the latter at the court of the sultan in northern India. The son of the *Malik al-tujjār* was in Awadh when he was executed by the sultan after 'Ayn al-Mulk's rebellion.[1]

Not all of the more prominent Muslim merchants of the west coast were peripatetic foreigners. At Gandhar the chief Muslims of the ruler's entourage were 'the sons of Khwaja Bohra', i.e. Indian Isma'ilis.[2] Merchants of Quilon were known as Sulis and were men of wealth; they are almost certainly identical with the Choolis (Bohra-Khoja) community of Malabar and Ceylon in later times.[3] The most powerful Muslim of the western coast, Sultan Jamal al-Din of Honavur, though described as the son of a shipowner, appears to have been a man of local birth with local blood in his veins.[4] The inhabitants of Honavur, from the Arab traveller's account appear a unified Indian Muslim community, all professing the Shafi'i faith, but with their women unveiled and dressed in Indian fashion. They earned their living by maritime trade, as they possessed no fields.[5]

Ibn Baṯṯūṯa provides considerable information about shipowners on the western coast of India. He twice alludes to the ships owned by the Sultan of Delhi. On one occasion the sultan placed three ships at the disposal of Shihāb al-Dīn, a friend and associate of the lord of the traders (*Malik al-tujjār*) al-Kāzarūnī. Shihab al-Din sailed in them, laden with goods which he had purchased from the sultan's largesse, from Cambay to Hormuz. At a later date Ibn Baṯṯūṯa found some ships of the Delhi sultan harbouring for the winter at Calicut.[6] The Hindu ruler of Gandhar by the mouth of the Gulf of Cambay placed one merchant vessel and one warship ('*uqayrī*) at Ibn Baṯṯūṯa's disposal. He also mentions that the Kovil or Prince of Jurfattan (a vassal of the Kolathiri of Eli) possessed many ships which went to Oman, Fars, and Yemen.[7] The cases of the Hindu ruler of Bacanore, with thirty warships, and of Sultan Jamal al-Din of Honavur who fitted out a fleet of fifty-two vessels against Sandapur have been noticed above (p. 155). As the son of a shipowner it may be assumed that Jamal al-Din employed his

[1] Ibn Baṯṯūṯa [68], (iii), 67–8, 173.

[2] Ibn Baṯṯūṯa [68], (iii), 195.

[3] Ibn Baṯṯūṯa [68], (iii), 193.

[4] Cf. Ibn Baṯṯūṯa's description of his style of life: Ibn Baṯṯūṯa [68], (iii), 180–1.

[5] Ibn Baṯṯūṯa [68], (iii), 179–80.

[6] Ibn Baṯṯūṯa [68], (iii), 68, 195. Ibn Baṯṯūṯa refers to a hundred ships belonging to a King of Ceylon, and eight of the Sultan of Ma'bar at an anchorage in Ceylon [68] (3), 217. We have adduced evidence above for a 'great ship' belonging to the Sultan of Bengal (Wang Gung-wu in Fairbank [296b], 59). For 'great ships' of the fifteenth-century sultans of Gujarat and the Deccan, see: Moreland [420b], 176.

[7] Ibn Baṯṯūṯa [68], (iii), 186.

vessels for mercantile as well as military purposes. The newly established sultanate of Madura, an offshoot from the sultanate of Delhi ruling over the Pandya territory in south India, possessed an admiral and strong defences of its main harbour of Mali-Pattan. At Ibn Baṭṭūṭa's instigation the sultan planned an invasion of the Maldive islands. He also noted eight of this sultan's vessels at an anchorage in Ceylon.[1]

Of other shipowners, Mithqal, evidently an Arab, resided at Calicut. He possessed 'great riches and many ships for trading purposes, in India, China, Yemen, and Fars'.[2] Other names mentioned by Ibn Baṭṭūṭa are the shipowner Ilyās, one of the most eminent inhabitants of the town of Cambay, and the Bohra Ibrahim, who kept six ships for his own especial use. The latter's brother also owned a ship.[3]

Of the activities of a small-scale 'pedlar' in the horse-trade we have a glimpse in the Russian Afanasio Nikitin's account of his travels. After wanderings in Persia, he embarked at Hormuz with his horses in a *tāva* or 'Indian ship' a week after Easter in 1469 or 1470. After coasting for six weeks and putting in at a port on the Makran coast and at Cambay, the ship reached Chaul. Chaul near Tana and modern Bombay, though probably a place of considerable antiquity, had become a prominent port under the rule of the Bahmani sultans of the Deccan in the fifteenth century.

Either Nikitin had disposed of his other horses earlier on the journey or they had not survived it. After disembarkation he proceeded southwards along the western coast with a single stallion till he came to a place which he called Juner (modern Junner) after twenty-four days on the road. At Juner the local governor of the Bahmani sultan, one Asad K͟hān, attempted to confiscate the stallion, having heard that Nikitin was a Christian who had not embraced Islam. At the intercession of a K͟hurasāni merchant, Nikitin and his stallion were released and proceeded inland towards Bidar, reaching Gulbarga after ten days.

Nikitin next went to the '*Urs* or commemorative festival at the Sufi shrine of Aland, some twenty miles north-east of Gulbarga, which that year fell around 1 October and lasted for ten days. This was a major trading fair within the Bahmani dominions, to which Nikitin states 20,000 horses were brought as well as other trade-goods. He failed to sell the stallion there and so proceeded to the capital of Bidar. He reached Bidar in the middle of November, and succeeded in selling the stallion around Christmas, for a sum sufficient to maintain him for a whole year.

[1] Ibn Baṭṭūṭa [68], (iii), 214, 217, 226–7, 229.

[2] Ibn Baṭṭūṭa [68], (iii), 189. Evidence of Mithqal's wealth exists in the form of the largest of the wooden mosques of Calicut, seven storeys high and still called by his name.

[3] Ibn Baṭṭūṭa [68], (iii), 175–6.

Nikitin does not mention any other trading ventures which he undertook. His next journey was at the invitation of some Hindu acquaintances he had made at Bidar, to see the festivities of the great Shaivite shrine of Perwattam (Parvatipuram) in Tamilnadu. Nikitin appears to have passed as a Christian or Muslim according to convenience, in the latter guise under the name Khwaja Yusuf Khurasani. He was evidently in a state of considerable cultural confusion, and in his narrative laments about his non-observance of Russian Orthodox festivals and rites alternate with untranslated invocations to Allah in Turkish. His case is evidence that ethnic and religious divisions among traders of the Indian Ocean were sometimes fluid, and that geographical *nisbas* may not indicate the ultimate place of origin of the traders to whom they were applied.[1]

At this period there is less evidence of the participation of Hindu merchants in overseas trade across the Arabian Sea. At Cambay there is no record of Hindu or Jain figures comparable to Vīrjī Vohra and other great Hindu *dallals* of seventeenth-century Surat. However, the Hindu ruler of Gandhar at the mouth of the Gulf of Cambay was able to place a merchant vessel as well as a warship of his own at Ibn Baṭṭūṭa's disposal, and one at least of the flotilla of junks in which the Arab traveller was to have sailed was apparently under contract to the Samori of Calicut.[2] Possibly Ibn Baṭṭūṭa, through his easy communications with other Muslims, minimizes the role of Hindu merchants. Marco Polo, describing the Bāniya community of Lar (Lāṭa – southern Gujarat) says that they acted as brokers to foreign merchants who were buying and selling commodities, in the period immediately before the Muslim conquest of the area. They were also employed by the Hindu rulers (the Chaulukyas?) to travel to the Coromandel Coast, there to buy pearls and diamonds.[3] At the beginning of the sixteenth century Barbosa noted the 'Gentile' Chetties of Coromandel together with the 'Moors' (Muslims) at Malacca as very rich and the owners of ships, which were called junks.[4] Regular trading connections between Hindu merchants of Gujarat and their agents in Old Hormuz are mentioned in two Indian works which appear to antedate the Muslim conquest of Gujarat.[5] In Hormuz at the middle of the fifteenth century unbelieving Indians are mentioned among the numerous foreign residents on the island; 150 years later we have an acount of a Brahman ascetic there.[6]

[1] Nikitin [78], (3), 8–18.
[2] Ibn Baṭṭūṭa [68], (iii), 191.
[3] Polo [75], (ii), 250–1.
[4] Barbosa [81], II, 159–60, 172.
[5] *Jagaducarita* and *Lekhapaddhati*, cited by Yadava [549b], 281.
[6] J. Verissimo Serraõ [490b], 93–4.

PART II

c. 1500–1750

CHAPTER VI

POPULATION

So far as is known, no census of persons was ever conducted in any part of the Mughal empire. The size of the population of Mughal India can, therefore, be estimated only on the basis of other data, the richest repository of which is the *Ā'īn-i Akbarī*, the unique work compiled by Akbar's minister, Abū-l Fazl, in 1595–6.

The *Ā'īn-i Akbarī* gives us details of the *ārāẓī* or area measured for revenue purposes, down to each *pargana*, the smallest administrative subdivision of the time. Moreland attempted to use these statistics, first, to work out the total area under cultivation at the end of the sixteenth century,[1] and then to estimate, on this basis, the total population of Akbar's empire.[2] He assumed that the *ārāẓī* represented the entire gross cropped area, and concluded that in western Uttar Pradesh, cultivation around 1600 was about three-quarters of what it was around 1900, and further that the proportion declined as one went eastwards, to be just one-fifth in eastern Uttar Pradesh and Bihar.[3] He thought that cultivated land per capita was the same in 1600 as in 1900; and, on this basis, estimated the population of the plains from 'Multan to Monghyr' to be between 30 and 40 millions. This, as his core figure, together with his estimate of 30 million for the Deccan and southern India (arrived at on the basis of other considerations), led him to estimate the total population of India in 1600 at about 100 million.[4]

Being the only estimate of its kind, Moreland's figure of 100 million for 1600 gained wide acceptance. But the weaknesses of his method are all too apparent. He used the figures for armies to build up his estimate for the Deccan and southern India, but did not use such figures for northern India. He also made too small an allowance for the population of regions not covered by his two basic estimates. On the latter count alone, Kingsley Davis would raise Moreland's estimate to 125 million.[5]

The crucial point, however, is whether Moreland is right in his interpretation of the *Ā'īn*'s *ārāẓī* statistics, which led him to postulate an extraordinary small extent of cultivation for 1600. In the first place,

[1] Moreland [422], 1–39.
[2] Moreland [421a], 19–21.
[3] Moreland [421a], 19.
[4] Moreland [421], 20–1.
[5] Davis [281], 24.

ārāzī was not just the gross area sown, but also included cultivable waste, land under habitation, tanks and channels and some uncultivable land. Such a redefinition of *ārāzī* would even further reduce the extent of cultivation postulated by Moreland. But, on the other hand, what Moreland completely omitted to consider was that *ārāzī* did not necessarily cover the whole of the area under cultivation. Large areas of assessed land still remained unsurveyed. The statistics of Aurangzeb's reign (1659–1707) show that the *ārāzī* then recorded was generally much larger than at the time of the *Ā'īn*; yet a high proportion of villages was still unmeasured in various provinces. A comparative study of the statistics of the *Ā'īn* and of Aurangzeb's reign enables us to discover in which provinces the *ārāzī* approached the maximum possible coverage of assessed land, and where it fell behind. For Aurangzeb's reign the numbers of measured and unmeasured villages even offers us an indication of the ratio that the *ārāzī* bore to the total assessed land.[1]

On the basis of such a study, it is possible to obtain some reliable data about the extent of cultivation during the seventeenth century. It is for example practically certain that the extent of cultivation, *c*. 1600, was about, or over, four-fifths that of *c*. 1900, in the provinces of Agra and Delhi, i.e. in western Uttar Pradesh, eastern Rajasthan and Haryana. In Awadh, it was probably a little over one-half of what it was around 1900; and in Allahabad province about a half. These two provinces comprised the central and eastern portions of Uttar Pradesh. The ratio of cultivation in 1600 to what it was in 1900 was also 1:2 in Bihar. In the Lahore province and the northern portion of Multan, covering western and central Panjab, the *ārāzī* seems, however, to have been less than half the cultivable area reported in the early years of this century. In Malwa and Khandesh, on the other hand, cultivation was only slightly less in extent in the latter half of the seventeenth century than it was about 1900. In the Aurangabad province, it was two-thirds, and in Berar less than three-fifths. The evidence with regard to Gujarat is not easy to interpret.[2]

It is difficult to convert these results for different regions into a general estimate of the area under cultivation in 1600. But we would not be far wrong if we were to say that the limits would be a half and three-quarters of the area under cultivation in 1900; and it would perhaps be a reasonable approximation if we suppose the cultivated area in the Mughal empire in 1600 to have been about 60 per cent of the cultivated area within the same territory in 1900.

It is not a simple matter to extract the size of population from the

[1] Habib [343], 3–6. Moosvi's comparison of J/A with J/M, where J represents *jama'* (estimated net revenue) given in the *Ā'īn*, A, the *ārāzī*, and M the map area suggests a new device for establishing the ratio between *ārāzī* and assessed land in different districts at the time of the *Ā'īn* (Moosvi [417], 101–2).

[2] Habib [343], 10–22.

extent of cultivation. Moreland was on dangerous ground in supposing that the land: man ratio of 1900 could be true for 1600 as well. On the contrary, one should rather expect that given the same technology, the smaller the area under cultivation the higher should have been the land: man ratio, since with greater availability of virgin land each cultivator could have more easily obtained the optimum size of holding suited to his resources. Thus if the extent of cultivation in 1600 was 60 per cent of what it was in 1900, one would rather expect the population in 1600 to have been much less than 60 per cent of what it was in 1901. It should have been, let us say, only about half. Since the population of India, according to the 1901 census, was 285.29 million, we may therefore estimate the population in 1600 at a little over 142 million.

Another device for estimating population on the basis of the information in the *Ā'īn-i Akbarī* has been suggested by Ashok V. Desai in a recent paper.[1] Desai compares the *Ā'īn's* information on prices, wages and crop rates with the data relating to 1961. He then establishes per capita consumption and per capita agricultural productivity. Finally, he takes the *Ā'īn*'s revenue rates on different crops to work out the land revenue per capita. With this figure at hand, he divides it by the total *jama'* (estimated net revenue) of the empire given by the *Ā'īn*. The result should represent the population of the empire at that time. Desai's own conclusion is that Akbar's empire contained a population somewhere between 64.9 and 88.3 million, but closer in all probability to the former limit, rather than the latter.[2]

Desai's detailed calculations have been criticized by Shireen Moosvi.[3] Her major criticism is that Desai ascribes excessively high productivity per acre to Akbar's time, and that in dividing the *jama'* by the hypothetical per capita revenue, he made no distinction between the *ẓabṭī* provinces and the others, where the revenue rates on which he based his calculations did not apply at all. Following Desai's own method, but assuming a smaller margin of difference in yields between then and now, and introducing other refinements, she arrives at the figure of 108.4 million for the population of Akbar's empire and 144.3 million for the whole of India.

This estimate, based entirely on data other than the measured-area statistics, closely corroborates our own estimate. But it is only fair to say that some of the assumptions accepted by both Desai and Moosvi are open to question, and further necessary modifications may considerably alter the estimates obtained by this method.[4]

[1] Desai [285], 42–62.
[2] Desai [285], 61.
[3] Moosvi [415], 181–95.
[4] Both Desai and Moosvi often use modern all-India statistics, where it could be more appropriate to use only the statistics for the places or regions for which Abū-l Faẓl [123] offers us data.

Still another method – perhaps the most dubious – was suggested by Moreland. This was to take the figure of the armies that could be raised by Indian states and multiply them by 30, on the supposition that no Indian administration could mobilize more than one armed man out of a population of thirty. Indeed, Moreland suggested that the actual ratio of population to armed men was probably higher.[1] The *Ā'īn-i Akbarī* contains a full census of the *zamīndārs'* retainers, who numbered 384,558 cavalry and 4,277,057 infantry in the entire Mughal empire.[2] To this must be added at least 200,000 for the Imperial cavalry and infantry.[3] Applying Moreland's ratio to the total of these figures, we get a population of 145.8 million for the Mughal empire. Enlarging it on the basis of the relative sizes of population of the regions according to the 1941 census, we get 182.3 million for the whole of India. Now, this estimate depends for its reliability entirely upon how sound the army:population ratio of 1:30 is. But it may be observed that were India to be assigned as low a population as 100 million as suggested by Moreland, we would have to assign one armed retainer or soldier for every four families, a very unlikely ratio.

It would obviously be foolish to feel certain about any estimate of Indian population for 1600, with the data we have. But it does seem that the balance of probability lies in favour of estimates that place it between 140 and 150 million. Allowing for the same territorial distribution of population as existed in 1941, Akbar's empire alone should have contained between 107 and 115 million people.

The next question to ask is, whether population registered growth in the Mughal period or remained stable. The answer largely depends on our estimate of Indian population in 1800. Kingsley Davis, whose own estimate for it in 1600 was 125 million, suggested that 'the best policy' was to assume that the population remained fixed at this point until 1750, whereafter with the progressive British annexation of India, it grew at a progressively increasing rate, practically doubling itself between 1800 and 1871.[4] But he has perhaps been led away by his own enthusiasm for the benefits of British rule; and as a result he has seriously underestimated the population of India in the period before the first census of 1868–72. There is much to suggest that India in 1800

Moreover, S. Moosvi's own work shows that it is not appropriate to take the *jama'* to represent the total assessments based on application of the revenue rates on the various crops to the total assessed area. The incidence of the *jama'* per unit of assessed area could be as low as half the revenue-rates on major crops (Moosvi [417], 102, 110).

[1] Moreland [421], 17–18; Cf. Davis [281], 24.

[2] Habib [343], 164.

[3] Lāhorī [157], II, 506–7, gives the figure of 200,000 cavalry and 40,000 infantry for 1646–7. Allowing for an increase in the imperial forces between 1600 and 1646–7, 200,000 would be a reasonable estimate of their combined strength in 1600.

[4] Davis [281], 24–6.

could not have had a population of much less than 200 million.[1] P. C. Mahalanobis and D. Bhattacharya gave an estimate of 207 million,[2] and Morris D. Morris arrives at a little lower figure (197.8 million) by calculating simply on the basis of the rate of growth accomplished between 1871 and 1921.[3]

The probability, then, is that the Indian population increased from a little under 150 million in 1600 to about 200 million in 1800, thus achieving an increase of slightly above 33 per cent in 200 years. This would mean that the population during the Mughal period did not remain stable though the compound rate of growth, 0.14 per cent per annum, was hardly spectacular and was much lower than the rate attained during the nineteenth century.[4]

The distribution of the population into rural and urban sectors is as difficult to estimate as determining the total size of population. There are, however, possibly two ways of working out the ratio of the urban population to the total.

One way would be by tracing the distribution of the agricultural surplus, on the assumption that the peasants' own consumption did not necessitate any significant productive activity in the towns.[5] The surplus was appropriated mainly in the form of land revenue, which amounted generally to a half of the produce, though it might sometimes be set at a lower proportion on lands newly brought under cultivation.[6] Out of this, the *zamīndārs* took their share ranging theoretically from 10 per cent to 25 per cent of the revenue, in different regions, but being in practice probably much above 10 per cent everywhere. They formed a rural class; and the bulk of their expenditure went to maintain certain strata of rural population, including their nearly 4.5 million armed retainers. There were also certain other subordinate claims to shares in the surplus, like those of revenue grantees, headmen, petty officials, hired troopers, servants of revenue collectors, and so forth, which had no significance for urban employment.

The net collection that reached the hands of the Mughal ruling class, i.e. the nobles holding *jāgīrs*, as well as the emperor (holding the *khāliṣa*), must have amounted to a very high proportion of the produce, even after allowance is made for the share of the *zamīndārs* and other local interests, and costs of collection. It could surely not have been less than

[1] I have set out the argument for this in my paper, 'Colonialization of the Indian Economy, 1757–1900', (Habib [350]), in *Social Scientist*, No. 35, Trivandrum, esp. 34–35.

[2] Mahalanobis and Bhattacharya [400].

[3] *IESHR*, XI, Nos. 2–3, p. 311.

[4] The population, increasing from around 200 million in 1800 to 285 million in 1901, grew by over 42 per cent, or by 0.35 per cent per annum at the compound rate, during the nineteenth century.

[5] Habib [343], 89.

[6] Habib [343], 190–96.

25 per cent of the value of the total produce, and might have been more. Now, as far as we can judge, this entire amount was spent in towns, and went to maintain directly and indirectly various strata of the urban population.[1]

If the pattern of consumption of the urban population among whom this surplus was disbursed was the same as that of the rural population, the determination of the relative size of the urban population would be a simple matter. Assuming that the same proportions of the urban and rural incomes were spent on the same kinds of foodgrains, and given the inelasticity of the demand for the ordinary and coarser foodgrains beyond the subsistence level, the population of the towns should have borne to the total population exactly the same ratio that the share of the agricultural surplus consumed in the towns bore to the total agricultural produce. That is to say, if the part of the produce appropriated by the ruling class and spent in the towns was 25 per cent of the total agricultural produce, the urban population should have been 25 per cent of the total population, and 75 per cent of the rural population.

But, in fact, the physical composition of the net surplus spent in the towns could not have been the same as that of remaining produce. The land revenue was largely collected in cash, and the form the extracted tribute took was not a share in each crop, but a share of the value of the entire agricultural produce. The portion of the agricultural surplus on which the Mughal-Indian towns subsisted, contained a far larger 'cash-crop' and a much smaller foodgrain component, than the produce left in the rural sector. It was, therefore, not possible for the towns to feed as large a population as would be suggested by the simple ratio of the net revenue collection to the value of the entire agricultural produce. How much less, is a question that could be answered only after a survey of the composition of the town population: how many were unproductively employed at subsistence wages as servants, slaves, etc. and thus probably had the same consumption pattern as the peasantry; how many were productively employed as craftsmen and skilled and semi-skilled labourers, creating a demand for materials that absorbed the non-food component in the extracted rural surplus; and how many belonged to the higher strata and the middle classes, generating demand for luxuries and delicacies, and requiring higher-grade produce from the countryside for their direct consumption, such as wheat, sugar-cane, fruits, etc.

It seems that the number in the first of these three categories was exceptionally large, so that while one may assume that the percentage

[1] See Habib [351] (*Enquiry*), 27–33.

of the urban population in the total could not have been as high as 25 per cent, it could also not have been drastically smaller. We should not therefore be far wrong in putting the urban population at about 15 per cent of the total population.[1]

The second way of estimating the relative size of Indian urban population in the seventeenth century is by working from what it was at the beginning of the nineteenth century, before the economic impact of the Industrial Revolution in England was extensively felt in India. Taking a number of districts in eastern India, it has been found that the population of eight towns within them declined from 923,344, *c.* 1813, to 866,749, *c.* 1872, although the towns included Calcutta which being the capital of British India, more than doubled in size during this period, and although certain towns, which were very large earlier, like Rājmaḥal, are excluded.[2] If we assume that this decline was representative of the decline in the Indian urban population as a whole, and if we then work back from the percentage of the urban population[3] reported in the 1881 census (9.3 per cent), we arrive at a figure for the urban population in 1800 equal to nearly 13 per cent of the total population (estimated at about 200 million). Since the inclusion of Calcutta has probably moderated the general rate of decline in our sample, the actual percentage of the urban segment in the total population in 1800 might have been higher than 13 per cent. It would, therefore, seem that the estimate of 15 per cent for the urban population in 1600 is probably not very far wrong.

The rural population must then have comprised something like 85 per cent of the total population. The village was generally the basic unit of rural settlement. Official statistics belonging to Aurangzeb's reign furnish us with numbers of villages for provinces and for their subdivisions (*sarkārs*).[4] A comparison of these statistics and modern census enumerations of villages discloses a curious fact. The number of villages during the seventeenth century was not generally smaller than at the end of the last century. On the contrary, in the entire territory extending from the Indus to the Son, embracing the British provinces of the Punjab and Uttar Pradesh, the number of villages was between one-third and one-half greater than the villages recorded in the 1881 census. In Bengal, Bihar, Gujarat, Malwa, and parts of the Deccan (Khandesh, Berar and Aurangabad) the number was the same as the one

[1] Cf. Habib [351] (*Enquiry*), 33–5.

[2] See: Habib [350].

[3] The census definition of 'urban' has covered the population of all towns above 5,000 and all such other places with population of less than 5,000, which census officials may consider to be non-agricultural settlements. See Davis [281], 249.

[4] The village and area statistics of Aurangzeb's reign, reproduced in: Habib [343], 4, give the figures against provinces. Saksena [74] wrote later, but drew his statistics from Aurangzeb's reign and gives the numbers of villages by *sarkārs*.

recorded in the 1881/1891 census, or only slightly smaller.[1] This suggests that the villages in the Mughal period were far smaller than the villages of today. Population since then would seem to have grown not by multiplying the number of villages, but by enlarging and even merging the existing village settlements.

As for the urban settlements, the author of the *Ṭabaqāt-i Akbarī*, writing *c.* 1593, says that Akbar's empire contained 120 big cities and 3,200 townships (*qaṣbas*), each having around it 100 to 1,000 villages.[2] Seeing that Aurangzeb's empire, excluding the Deccan provinces of Bījāpūr and Ḥaidarābād, was assigned a total number of 401,567 villages (the actual total of the provincial figures comes, however, to 455,698),[3] the number of cities and townships and the town: village ratio given by the *Ṭabaqāt-i Akbarī* does not appear to be an unreasonable one. If we now take our estimate of the percentage of the urban in the total population (15 per cent), and apply it to Akbar's empire, for which we have estimated a total population of 107 to 115 million, the urban population of the empire should, in absolute numbers, have been anything between 16 and 17 million. This number divided by the number of cities and townships given by the *Ṭabaqāt-i Akbarī*, gives an average of about 5,000 persons for each urban settlement. This seems quite a reasonable figure, and tends to give us greater confidence in the series of estimates upon which it is based.

Among the Mughal-Indian towns, some cities reached considerable size. We have numerical estimates of populations of a few of the cities; and these are given by European travellers. In the case of a few others, we are offered comparisons of the populations of Indian cities with those of particular contemporary European cities. As a result, the following estimate of populations of certain Indian cities can be presented or reconstructed (see table 3).

For many important towns of Mughal India, we do not have any estimates at all, good or bad.

These estimates, in spite of their obvious weaknesses, broadly confirm our inferences about the relatively high proportion of urban population in India. It may be mentioned, for purposes of comparison, that in 1600 Europe had probably only three cities exceeding 200,000 in population, and nine exceeding 100,000.[4] Even a century later, in 1700, the total population of towns of 5,000 and above in England, Scotland and Wales, did not exceed 13 per cent of the total population.[5] And England by 1700 was one of the most urbanized parts of Europe, containing its largest city, London.

[1] Cf. Habib [343], 10–22, 24.

[2] Niẓām U'ddīn Aḥmad [149], (ed. De and Husain), VIII, 545–6.

[3] See table in: Habib [343], 4.

[4] *New Cambridge Modern History* [252], III, 33–34.

[5] Deane and Cole [283], 7.

Table 3. *Estimate of population of towns in Mughal India*

		Year of estimate	Inhabitants	Reference, see note
1	Agra			
	(a)	1609	500,000	1
	(b)	1629–43	660,000	2
	(c)	1666	800,000	3
2	Delhi	1659–66	500,000	4
3	Lahore	1581 & 1615	400,000–700,000	5
4	Thatta	1631–5	225,000	6
5	Ahmadabad	1613	100,000–200,000	7
6	Surat			
	(a)	1663	100,000	8
	(b)	1700	200,000	9
7	Patna	1631	200,000	10
8	Dacca	*c.* 1630	200,000	11
9	Masulipatam	1672	200,000	12

1 J. Xavier's letter, tr. Hosten, *JASB*, N.S., XXIII (1927), p. 121.

2 Fray Sebastian Manrique, *Travels*, trans. C. E. Luard & Hosten, II, p. 152.

3 Thevenot was told that though 'a great Town', Agra was not such 'as to be able to send out two hundred thousand men into the field' (S. N. Sen, *Indian Travels of Thevenot and Careri*, p. 49). We have assumed a ratio of 1:4, to represent the number of able-bodied men to the total population.

4 Francois Bernier, *Travels in the Mogul Empire, 1656–68*, trans. Constable, ed. Smith, London, 1916, pp. 281–2, says Delhi was as large as Paris. At about this period, Paris had 'a population of almost 500,000' (*New Cambridge Modern History*, v, p. 246).

5 Monserrate, *Commentary*, trans. J. S. Hoyland, annotated by S. N. Banerjee, Cuttack, 1922, pp. 159–60, and Coryat, *Early Travels in India*, ed. Foster, p. 243, say that Lahore exceeded Constantinople in size. About 1600, Constantinople 'claimed for certain 400,000, and perhaps as many as 700,000 inhabitants' (*New Cambridge Modern History*, III, p. 34).

6 Bocarro (*Journal of Sind Historical Society*, IV, p. 201) says that Thatta contained 50,000 houses. The number of inhabitants has been deduced from this by assuming the house–inhabitants ratio to be the conventional one of 1:4.5.

7 Ahmadabad is said to be as big as London and its suburbs in *Letters Received by the East India Company from its Servants in the East*, II, p. 28, and Withington, in *Early Travels in India*, ed. Foster, p. 206. At the end of the seventeenth century, London is credited with a population exceeding 100,000, but below 200,000 (*New Cambridge Modern History*, III, pp. 33–4).

8 Fr. Manuel Godinho, trans. G. M. Moraes, *JBB(R)AS*, New Series, XXVII, ii, pp. 124–5.

9 Hamilton, *A New Account of the East Indies*, ed. W. Foster, I, p. 89.

10 Manrique, *op. cit.*, II, 140.

11 Ibid., I, 44–5.

12 J. Fryer, *A New Account of East India and Persia, being Nine Years' Travels*, 1672–81, ed. W. Crooke, I, p. 90.

CHAPTER VII

THE STATE AND THE ECONOMY

1 The Mughal empire

The economic activities of the Mughal empire derived from the basic urges which created and sustained it as well as the structure of polity devised for their fulfilment. A recent work has used the not-too-felicitous term 'conquest state' to characterize the empire. The term has, however, the virtue of pinpointing the fact that the state was created by, and largely existed for, acts of conquest. Quest for glory, a spirit of adventure and ego-satisfaction on a mammoth scale may have all played their parts in inducing these acts. Yet the uncomplicated desire of a small ruling class for more and more material resources – an almost primitive urge to consume and acquire – was beyond doubt the primary condition on which the empire established itself. The now familiar efforts to play down the economic urges behind later empires would have little relevance to the Mughals: their economism was simple, straightfoward and almost palpable. And there was no containing it until it collapsed under the weight of its own contradictions. The greed for empire was not amenable to self-control: Shāhjahān, for instance, was content to have Bijapur and Golconda as tributary states, but the court faction in favour of annexation, attracted by the great wealth of the southern states, inevitably prevailed. Expansion was also in the logic of things. The empire, held together by force, needed a vast machinery of coercion and, hence, adequate resources to sustain it. And as it expanded to ensure adequate supply of resources, its needs increased more than in proportion.

A cavalier indifference to economy characterized every branch of the administration and the army. The tent which took a thousand men one week to erect with the help of machines, the employment of five or more persons to look after each elephant in the imperial stables, the production of increasingly large-sized cannon which were often dis-functional, all suggest an emphasis on grandeur at the cost of efficiency. The army on the march – a moving city with 200,000 to 300,000 men and vast quantities of tents, baggage, furniture, etc. carried by some 50,000 horses and oxen – was as much a display of

imperial life-style as a purposive instrument of state power. Over the years, the empire had indeed acquired the excess fat of incredible affluence. Akbar's feat of a march from Fatehpur Sikri to Gujarat in nine days was not repeated by his descendants. Nor were the latter inclined to learn any lesson from the success of their chief enemy, the lightly clad, inexpensively equipped and extremely effective Maratha cavalry. The resources which such a state could consume were virtually limitless and when, inevitably, these were in short supply, the Mughals tried to fill the gap by squeezing blood out of stone rather than by pruning what was superfluous. The Mughal state was an insatiable Leviathan: its impact on the economy was defined above all by its unlimited appetite for resources.

In a predominantly agrarian economy these resources were extracted primarily from the agricultural sector, in the form of land revenue assessed as a fixed share of the produce. The rate of assessment varied – as discussed elsewhere in this volume[1] – from a third to a half or more of the output. To this were added additional imposts and costs of collection, together adding up to as much as 25 per cent of the land revenue. In *zamīndārī* areas, there were further imposts over and above all these. The machinery for extraction aggravated the repressive character of the system. The great bulk of the revenue-yielding territories – nearly all by the second quarter of the eighteenth century – were assigned as *jāgīrs* to nobles who had no local ties and were frequently transferred, though the latter practice gave place for a time to long-term and even hereditary rights during the eighteenth century. However, for the greater part of our period, it was in the *jāgīrdārs*' interest to extort as much as they could from the peasantry without any concern for the economic future of the areas temporarily under their control. By the time of Farrukhsiyar's reign, the system of revenue farming, or *ijāra* – with bankers and speculators investing in this highly profitable endeavour – had become widespread. Already in Aurangzeb's reign, Manucci encountered this institution and thus described it in his picturesque style: 'When any hungry wretch takes it into his head to ruin the Kingdom, he goes to the King and says to him "Sire! If your Majesty will give me the permission to raise money and a certain number of armed men, I will pay so many millions,"...The men armed with the order, and impelled by their desire to gain an overplus on the sum contracted for, go about seizing everybody and putting them to torture.'[2] Both contemporary observers and modern historians have traced the ruthlessness in revenue collection partly to the temporary nature of the *jāgīrdārs*' and *ijāradārs*' interests. But the Hindu rajas, who had more long-term interest in the economic welfare of their territories,

[1] See chapter IX.
[2] Manucci [110], III, 48–9.

do not appear to have shown any awareness of the fact. Their government has been described as 'the most tyrannic and barbarous imaginable': they treated 'their subjects worse than if they were slaves'.[1] The peasants in these territories, we are told, were first compelled to accept a certain level of assessment, and then forced to pay a half or a third more than what they had contracted for and to buy the king's share of the produce at as much as 50 per cent above the market rate. In the light of such facts, the view that the entire agricultural surplus – i.e. all that was not essential for the bare subsistence of the producers – was extracted as revenue, seems reasonable.

This view is, however, not entirely consistent with some of the available evidence, both direct and indirect. The *ẓabṭ* system contained two positive incentives to agricultural development: first, the differential rates of assessment biased in favour of the more highly priced crops and, second, the practice of charging lower rates on land which had been lying fallow with a gradual return to the full rate of assessment. The former encouraged the cultivation of the commercial crops; the latter, extension of cultivation: both were calculated to leave a share of the 'surplus' with the producer. The most important indirect evidence relates to the stratification of rights in land among those involved in production and the difference in the sizes of land-holding, wealth and income among the peasantry. If the entire surplus was extracted, then all peasants would be equally poor and stratification would at best be a socio-legal and not an economic fact: neither of these appears to have been the case. An eighteenth-century source[2] provides the further information that the petty *manṣabdārs* with inadequate forces at their disposal pressed hard only on the more pliable *ẓamīndārs* who passed on the burden to the *ra'īyat* (peasants) under them. The latter migrated to the territories of the defaulting and powerful *ẓorṭalab ẓamīndārs* who, along with their *ra'īyat*, flourished at the cost of the hapless *manṣabdārs* as well as the weaker *ẓamīndārs*. Evidently neither the *ẓorṭalab ẓamīndārs* nor their *ra'īyat* were deprived of the entire surplus.

In fact, the land-revenue system was devised all along the line to take away from those who had not. Those with superior rights in land as assessees and collectors of the state share of the produce could pass a part of their burden on to the small peasantry under them. A uniform rate of assessment pressed harder on the peasant with a small holding than on his big brother. Judging by the experience of more recent times, it seems more than likely that the poorer peasant stuck to the cultivation of the hardy, coarser, foodgrains, leaving the production of the lucrative commercial crop to the more affluent. In such a context, the monetization

[1] Manucci [110], III, 46.
[2] Bihārī [124] (Farrukh-siyar's reign) cited in: Siddiqi [501], 17.

of revenue demand with its built-in pressure to sell, meant a further degree of impoverishment for the poorer peasant. Hence the phenomenon of indebtedness to the rural moneylender with expensive credit meeting the needs of revenue payment and the cost of seed and livestock but not of any investment in improvement. So little was the peasant's gain from his productive effort, that his 'legal' obligation to cultivate – to ensure that the state was not deprived of its much-needed resources – had actually to be enforced: '...the ground', wrote Bernier, 'is seldom tilled, otherwise than by compulsion'. While specific evidence for peasants being forced back into imperial territories from the chiefs' domains whither they had fled comes from Gujarat,[1] it is unlikely that such action was confined only to that province. Bernier's impassioned reference to 'a tyranny often so excessive as to deprive the peasant and artisan of the necessaries of life, and leave them to die of misery and exhaustion...a tyranny, in fine, that drives the cultivator of the soil from his wretched home to some neighbouring state, in hopes of finding milder treatment' cannot be dismissed as supercilious rhetoric in the light of such evidence. His statement that the whole country was 'badly cultivated, and a great part rendered unproductive from the want of irrigation' because no one was 'found willing and able to repair the ditches and canals' or that 'a considerable portion of good land' remained 'untilled for want of labourers many of whom perish in consequence of the bad treatment they experience', probably also contain more than a grain of truth.[2]

Yet it would be incorrect to represent the Mughal state as a mere incubus sucking the lifeblood of the peasantry. Welfare of the peasantry, for reasons ideological as well as practical, was a basic norm of policy, though the nature of the Mughal state and its ruling class inevitably induced a persistent tendency to deviate. Whatever the reality, ruthless exploitation was at least not cynically accepted as the birthright of kings and nobles. In his old age Aurangzeb recounted the tragic failure of his life not in terms of an empire facing imminent ruin, but his inability to protect the *ra'īyat*. This concern was repeatedly expressed in instructions to nobles and functionaries, instructions which were probably less ineffective in provinces contiguous to the imperial capital than in the outlying territories. Ensuring security of tenure – though not an important issue when the supply of land in relation to demand was super-abundant – was an active concern of Mughal policy: *zamīndārs* were forbidden to convert land tilled by peasants into land tilled by the former's hired or dependent labour.[3] As discussed above, positive incentives were also built into the revenue system itself.

[1] Grover [326], 152–5; *Mir'āt-i Aḥmadī* [167]: (text), 214; (trans.), 188.
[2] Bernier [102], 205, 226–7.
[3] Habib [346], 71.

While it is probable that the have-nots of Mughal India's agrarian society suffered as badly as Bernier and other contemporary observers would have us believe, in all likelihood the system benefited sections of the rural society who had a share in the spoils. Not all that was extracted from the producer was drained away from the countryside. If the revenue collected was between a third and a half of the agricultural produce, the net portion which was taken away has been estimated at a quarter to a third: the difference remained in the hands of the *zamīndārs*, usurers, headmen and agricultural castes with superior rights in land. Probable extension of the area under cash-crops and the introduction of an important new product, tobacco, were positive features of the Mughal agricultural scene: the stick alone, in the absence of carrots, would not have produced these results. Collection of revenue in cash stimulated production for exchange: the affluent cultivator must have benefited from the development which probably further impoverished the poor. It also meant more power to the moneylender's elbow.

Rural society in Mughal India was not an undifferentiated mass of pauperized peasants. It was a spectrum containing the powerful *khūṭs* or chiefs at one end and the menial *balāhar* at the other. Alternative and overlapping institutions for revenue extraction – *khāliṣa*, *jāgīr*, *zamīndārī* and *ra'īyatī* villages, etc. – with very different implications for the various segments of agrarian society affected by them were not neatly segregated one from the other. A single *pargana*, Fatehpur, contained eight *ra'īyatī* and nine *zamīndārī* villages; of the former, two were held as *a'imma*, grants in recognition of piety or scholarship, two were deserted, one assessed according to the *zabṭ* and for one a single person engaged for land revenue.[1] The state as revenue extractor hardly could have meant the same thing to the inhabitants of Fatehpur's different villages; its impact was also likely to have been different on the single person who engaged for land revenue from that on the other *ra'īyat*. Of the seventeen villages, it may be noted, only two were deserted, presumably by Bernier's excessively harassed peasantry.

Amidst the complex welter of rights in land, one emerging tendency can be discerned quite clearly: the growth of 'property' rights and of a market in these. The inverted commas are still relevant because the ownership was by and large confined to particular rights over land and not yet fully articulated as an alienable and unrestricted claim over land; the exceptions to this pattern were not quantitatively significant. The many experiments and compromises to which the Mughals resorted so as to maintain a viable machinery for the extraction and distribution of the agricultural surplus, stimulated the development in question. The

[1] Siddiqi [501], appendix A.

development of *zamīndārī* rights – heritable, saleable and actually mortgaged – is the most important instance of such a causal link. The Mughals leant heavily on the *zamīndārs* for the collection of revenue and, in the process, reinforced their rights and powers which derived originally from outside the imperial system. A measure of stratification in *zamīndārī* rights was introduced with some *zamīndārs* paying tribute, others holding their land as *jāgīrs* while still others acquired non-hereditary rights by royal order. When revenue farming became widespread, powerful *zamīndārs* took advantage of the development, to acquire extensive *ta'alluqadārīs* defined as 'a newly purchased *zamīndārī* and a tenure which entitled its holders to engage on behalf of other *zamīndārs*'.[1] Through investments in revenue farming many speculative bankers also emerged as absentee landlords. In Bengal, Murshid Qulī Khān created six very large *zamīndārīs* which paid half the revenue of the *ṣubā*. All these rights, being alienable, created a large and active market in properties. Revenue grantees, rural usurers, and aspiring headmen freely purchased these rights creating a very heterogeneous body of *zamīndārs*. The *jāgīr* system, before its virtual collapse by the mid-eighteenth century, also developed features of hereditary rights owing to the weakness of the central administration; these rights, however, did not become alienable. On the other hand, the extensive *madad-i ma'āsh* grants, though subject to resumption, were both heritable and saleable. In the confusion which characterized the last phase of the empire, the tendency to convert claims to a share of the produce into an absolute proprietory right over land appears to have been general. The *zamīndār's* position in pre-Plassey Bengal anticipated in essential details the Permanent Settlement of land revenue.

If the upper strata of rural society were beneficiaries of the Mughal revenue system, imperial decline was not an unmixed blessing for them. On one point, they always stood on the same footing as the poorer peasants: non-payment of revenue was treated as an act of rebellion punishable with expropriation, enslavement and death. Since the revenue settlement was always with the upper strata who acted as 'intermediaries' for purposes of collection, they must have been the primary objects of the expeditions against the *ra'īyat-i zor ṭalab* – *ra'īyat* from whom the revenue had to be collected by force, mentioned so frequently in our sources. The agrarian risings in the last phase of the empire which *inter alia* introduced two important new elements in the north Indian polity – the Jats and the Sikhs – were almost certainly led by the same rural classes.

The rising pressure of revenue demand – which weighed heavily on the strong and the weak alike and impinged on the *zamīndārs*' traditional

[1] Siddiqi [501], 26.

perquisites – has been identified as the root cause of these disturbances. One wonders if this was the whole story. The estimates of the revenue expected change but little over long periods. To assume that the demand nevertheless became increasingly intolerable because of declining taxable capacity is to assume that productivity of land and labour was also on the decline. There is nothing in our sources to suggest such a trend. Even if one takes literally Bernier's analysis of the effects of tyranny, his uncultivated fields and neglected irrigation refer to a static, not a developing, situation. In the mid-eighteenth century, agriculture in most parts of India – with the probable exception of the regions devastated by the war with the Marathas – does not appear to have been in a worse state than in the days of Akbar.

The scarcity of *jāgīrs* with which to remunerate the *manṣabdārs* reflected not merely a pressure on stagnant resources: it was at least in part a result of administrative failure, and the incapacity of a weakened ruling class to extract a high proportion of the produce. The big *jāgīrdārs* in their financial distress tried to economize on the contingents they were required to maintain and inevitably came to depend on revenue farmers for the collection of revenue. It is not difficult to imagine who benefited most from the arrangement. The petty *manṣabdār* languished even more while the *zor ṭalab zamīndār* flourished. The agrarian risings against the Mughal emperor were no doubt in part desperate bids by an over-exploited peasantry. One would, however, like to know more of the role played by the powerful rural élite who saw in the decline of imperial power their door of opportunity. It is significant that the social groups which in many parts of India replaced the *manṣabdār-jāgīrdārs* in the hierarchy of political power were, as a class, firmly entrenched in their rights over land. Perhaps the decline of the empire was a positive turning point in the political and economic career of the rural élite – a story of which our knowledge is still very inadequate.

We do not know what proportion of the agricultural surplus went to the numerous class of rajas, *zamīndārs* and the owners of superior rights in land. Judging by the number of armed retainers maintained by the *zamīndārs*, it is unlikely to have been small. Then, the *a'immadārs* – the emperors' 'army of prayer' – were assigned some 2 to 5 per cent of the revenue-paying land in the different provinces. The bulk of the realized revenue – estimated at something between a third and a half of the gross national product! – went to the emperor and the *manṣabdārs*. The emperor's share, consisting of the income from the *khāliṣa* plus the tribute from feudatories, varied from time to time: the *khāliṣa*'s share in the total *jama*ʿ fluctuated between 5 per cent and 25 per cent. The balance of revenue income was distributed very unevenly among the

manṣabdārs of different ranks:[1] in 1646, 655 of them disposed of 61.5 per cent of the assessed revenue; the *jāgīrs* accounting for six-sevenths of the *jama'* were assigned to a total of 8,210 *manṣab*-holders. Thus an infinitesimal proportion of the population disposed of the bulk of the agricultural surplus and in so doing influenced crucially the course of the economy.

The survival of the empire and its ruling class depended on their power to coerce – a fact clearly brought home when this power declined. Hence, the largest part of the *manṣabdārs'* income – 77.2 per cent in the case of the 445 highest-ranking nobles in 1647 – went into the maintenance of the armed forces, especially the horsemen they were required to retain. Of the latter, there were 185,000 in 1647. Besides, there were 7,000 cavalrymen and matchlock-bearers and 40,000 artillery men in the imperial establishment as well as 40,000 infantry. To this one has to add the nearly 4.7 million retainers including 300,000 horsemen in the employ of the *zamīndārs*. Taking into account the large number of non-military personnel in the service of the army, the nobles and the imperial establishment and the families of all the people thus employed, the total number dependent for their livelihoods on employment in the armed services and associated activities has been estimated at some 26 million,[2] a remarkably large figure for a population estimated at a mere 100 million by one authority. The bulk of these 26 million were maintained at a level of bare subsistence: the pay of a foot-soldier ranged from 100 to 400 *dāms* a month. To that extent the deployment of the agricultural surplus to retain the armed forces did little more than help ensure the extraction of the same surplus. The plentiful supply of cheap labour for the army and associated services was maintained largely by the flight of over-harassed peasants from their agricultural occupations. In the latter's case, such employments amounted to a shift of labour directly from productive to unproductive occupations. Here was a vicious circle of coercion helping to maintain a machinery of coercion. It would, however, be unrealistic to look upon the armed forces as something entirely negative in the context of the economic life of the period. Mughal peace and a vast unified empire had very positive implications for the economy of the sub-continent. The army was a crucial element in the institutional framework which sustained that empire, besides being a bulk consumer of a wide range of commodities including such military hardware as cannon and matchlocks. Further, the horsemen were paid at rates well above the subsistence level and hence their income implied an addition to the total market demand. The import of horses for the army paid for with

[1] See chapter IX.

[2] See: Habib [351].

exports – mainly manufactured goods – also had the effect of indirectly stimulating the economy.

Next to the expenditure on the armed forces, the main charge on the ruling élite's income was the maintenance of a truly fabulous life-style.[1] Some idea of its magnitude may be formed from a contemporary's remark that in Delhi's bazaar a young nobleman could expect to buy only the barest necessities with Rs. 100,000.[2] The imported luxuries – mainly from Iran and central Asia – indirectly stimulated exports, while the consumption of domestic products helped sustain a vast market for luxury goods. A portion of the domestic manufactures was no doubt secured for the nobles through coercion on terms uneconomic for the producer, but the evidence clearly suggests that the bulk of these commodities were procured through normal exchange, stimulating production. The nobles' taste for the products of high and intricate skills encouraged the tendency to specialization which was a characteristic feature of India's manufactures. In one way, the ruling élite contributed directly to the growth of luxury manufactures. The *kārkhānas*, or workshops for the production of luxury goods, were parts of the imperial as well as the nobles' establishments. One noble, Bakhtāwar Khān, established *kārkhānas* in Delhi, Agra, Lahore and Burhanpur. The imperial *kārkhānas* produced not only luxury goods but arms as well, and acted as training grounds for skills which eventually could be placed at the disposal of nobles and feudatories. Bernier's account of the near-servitude of the artisanate makes an important exception. 'The arts in the Indies', he wrote, 'would long ago have lost their beauty and delicacy, if the Monarch and principal Omrahs did not keep in their pay a number of artists who work in their houses, teach the children, and are stimulated to exertion by the hope of reward and the fear of the Korrah. The protection afforded by powerful patrons to rich merchants and tradesmen who pay the workmen rather higher wages, tends also to preserve the arts.'[3] The wages of skilled artisans working in the imperial *kārkhānas* as given in the *Ā'īn* were well above the subsistence level.

It is often assumed that the army of servants and retainers in the employ of the emperor and nobles lived at the margin of subsistence and were maintained primarily for purposes of useless display. Unless one accepts some absolute standard by which to judge what is 'useful' or otherwise, the latter assumption is certainly erroneous. The tendency towards minute specialization built into India's socio-economic *mores*, interacting with the Mughal nobility's evidently perfectionist taste for

[1] For a discussion of the nobles' pattern of consumption and its impact on the economy see chapter x.

[2] *Muraqqa'-i Dehlī* [73], cited in: Habib [351].

[3] Bernier [102], 228–9.

highly-skilled services, created a fantastic range of skilled-service occupations. Attached to the imperial stables were fourteen categories of servants with specialized duties besides three categories with executive or official functions. And if the weavers producing muslin or the jeweller were usefully employed, there is no reason to consider useless the services of the *hāḍas* who taught 'horses the elementary steps'. As to the wages, if the data relating to the employees in the imperial establishment are any guide, several categories of servants with not very exalted functions – like the *akhtachīs* who looked after the harness, the *hāḍa*, the *mirdāh*, 'an experienced groom placed over ten servants' – had the pay of *aḥadīs* which could be more than Rs. 500 per month. The driver of an ox-drawn carriage could draw as much as 12 *dāms* per day, besides an annual allowance if they also repaired the carts which worked out at about 6 *dāms* a day – not a subsistence wage when the price of foodgrains ranged from 6 to 12 *dāms* per *man* (56 lb.).[1] In short, part of the surplus extracted as revenue went to create and maintain a class of skilled servants, whose skills had a market demand in that period and whose income, well above the subsistence level, stimulated the demand for commodities.

The employees of the Mughal state and nobility included a vast array of lesser functionaries ranging from *aḥadīs* and revenue officials to petty clerks and accountants attached to every department of the administration and every noble's establishment. Recent research indicates that the actual income of such functionaries frequently exceeded their nominal pay and many of them could aspire to a life-style modelled on that of the *amīrs*.[2] The revenue paid by the peasant thus sustained a middle-income group. Given the size of the administrative apparatus and the lack of concern for economizing on manpower, this group was unlikely to have been very small. At one level, they were petty exploiters adding through their extra-legal exactions to the burden of the producers. At another, they, too, like the armed forces, were an essential prop of the structure of empire: their function was not without positive relevance to the functioning of the economy.

The intelligentsia, including the professional classes, was not an extensive body in Mughal India. A fair part of it was directly patronized by the emperor, rajas and nobles. Bernier was misled by the absence of European-type 'academies and colleges' in India into concluding that a universal ignorance was the natural consequence of the Mughal tyranny which precluded the 'benefices, the employments, the offices of trust and dignity, that require ability and science'. Poets, scholars, artists, musicians, calligraphists, physicians and the like were all beneficiaries of imperial or aristocratic munificence. Together, they

[1] Abū'l Faẓl [123], I, 65, 145–6, 159, 259.
[2] See: I. A. Khan [380].

constituted a fair proportion of the middle class. More important, the peasant's surplus was very usefully at work here, helping to create and continue significant cultural forms, the rich tapestry of Indo-Mughal civilization

The Mughal state and the nobility invested a part of their income in the infrastructure. Administrative convenience rather than provision of facilities for economic activity motivated such investments, but they did help stimulate the economy. At least three major cities of the empire – Lahore, Agra and Shahjahanabad (Delhi) besides the short-lived Fatehpur Sikri – were created by the Mughals: the first two were mere villages before they became centres of administration. Resources were lavished on Delhi, an excellent example of Mughal town-planning. Indirect evidence suggests that some of the provincial capitals like Dacca and Aurangabad were similarly built up by the Mughals, with the nobles and other affluent sections of the community contributing their shares to the construction when they came and settled there. In the case of Delhi, the *amīrs* wishing to gain Shāhjahān's favour, 'embellished the city at their own expense'.[1] The practice of planting trees by the roadside to afford much-needed shade along the trunk routes – which goes back to Aśokan days – was maintained by the Mughals who also put up road-signs for the convenience of travellers. Both royalty and nobility built on a lavish scale – constructing mosques, sarais, bridges and paved tanks. The massive investment in fortresses, too, not only served the cause of the Mughal peace, but provided 'public buildings' housing the administrative offices.

The ruling class also invested directly in two very different types of economic activity. The first was horticulture. Everyone from 'the emperors to rich peasants' had orchards producing for the market. The fact that India began to grow a variety of fruits adopted from central Asia, Iran and the New World owed much to this aristocratic enterprise.

Of more dubious value was the nobility's involvement in commerce. At one level, it helped channel part of the resources siphoned off agriculture and manufacture into the export-import trade and thus stimulated the production of export goods. Virtually every section of the ruling class, from members of the royal family to petty *shiqqdārs*[2] in charge of the smallest administrative units participated in this activity. In the case of someone like Mīr Jumla, who was a leading merchant with a large fleet of ships in his own right before he joined the Mughal service, this activity was not very different from that of other traders except that the capital came partly from the empire's revenue

[1] Bernier [102], 280–1.

[2] See: Manrique [98], I, 440–1: The *shiqqdār* of Pipli sent 'a big new ship' to Cochin loaded with different kinds of merchandise.

resources. For others who placed their money on vessels going to the Red Sea, the Persian Gulf and the archipelago, it was more of a speculative enterprise. The activity had negative implications for trade and manufactures when the emperor or nobles used their authority to corner the market. In 1640–1, for instance, the emperor and Āṣaf Khān invested Rs. 100,000 in cloth at Ahmedabad for Mokha and ordered weavers and dyers not to work for anyone else until this order was supplied.[1] The imposition of such monopolies were not only in the nature of additional taxation, but disrupted the normal flow of exchange activities. The official involvement in the internal trade – of which the most notorious example was the activities of the *ṣūbadārs* Shā'ista Khān and Prince 'Aẕīmushshān in Bengal – was virtual extortion organized as commerce. The royal monopoly over salt, farmed out to traders, was in effect a form of additional taxation. Shā'ista Khān turned it into a source of private profit and extended the monopoly from time to time to other commodities – like saltpetre, beeswax and even fodder. When he or 'Aẕīmushshān forced merchants to buy their wares at prices they themselves dictated, the activity in question hardly deserved the name of trade any longer. Aurangzeb's prohibitory orders to the officers in Gujarat asking them not to buy grain cheap and sell it dear, suggests that such interferences with the market were not exceptional.

Perhaps the most wasteful economic activity of the Mughal ruling class was their practice of hoarding up immense treasures. In the absence of investment opportunities this was the most obvious way of amassing wealth providing ready access to resources to buttress one's political power or guarantee the maintenance of a high standard of consumption. For the economy, hoarding was equivalent to siphoning off and burying so much productive resources. De Laet estimates Akbar's treasures at his death at about 522.4 million florins.[2] The treasure hoarded by nobles was almost equally staggering. In thirteen years as governor of Bengal, Shā'ista Khān was believed to have accumulated Rs. 380 million.[3] At a more modest level, treasures worth between Rs. 3 and 10 million are known to have been left by a number of nobles at their death. The system of escheat – once believed to have discouraged savings – essentially consisted in the emperor recovering from the dead noble's assets whatever was due to the treasury and distributing the balance at his will among the heirs. The confiscations might exceed the claims of the state – a practice which Aurangzeb tried to stop – but the cases of total expropriation appear to have been rare. In any case, the system did not discourage hoarding.

The Mughal official class consisted largely of Persian and central Asian

[1] *Dagh Register* [38], (1640–1), 308.
[2] De Laet [93], 107–9.
[3] Streynsham Master [32], I, 493.

fortune-seekers and their descendants. Between 1679 and 1707, out of 575 nobles of the rank of 1,000 and above, there were 182 Hindus – mainly Rajputs and Marathas – and 69 Indian Muslims. Since the majority of the Hindu *manṣabdārs* came from the established ruling orders, for the Hindu population in general the higher imperial services were not something they could aspire to. The Indian Muslims were recruited from a slightly more varied social group. In other words, fresh recruitment to the ruling class was restricted mainly to alien social groups. The skilled or the clever among the native population could hope for a share in the surplus extracted by the state mainly as lesser functionaries or as creative artists and scholars patronized by kings and nobles. The empire was also characterized by a one-way flow of resources from the outer provinces to the central parts of the empire, or wherever the centre of power might be at a given time. When a kingdom was annexed, the patronage to arts and letters offered by the local dynasty was largely withdrawn. The resources drawn from the provinces were spent heavily on luxury consumption in and around the metropolitan cities and the royal camp. When Golconda was annexed, the Mughal officials 'began to send the greater part of their surpluses directly to the central treasury at Aurangabad, or to the mobile imperial camp. Thus, the wealth of Golconda,...began to be systematically drained.'[1] Similar statements would probably apply to many other parts of the empire as well. For the indigenous population in many parts of the sub-continent, the Mughal empire was a machine to extract resources to be consumed or hoarded by a small number of aliens, with a share of the spoils going to the native ruling class.

This negative record is balanced by one very positive feature of the empire. If the Mughals were ruthless in the expropriation of the surplus, their rule beyond doubt brought a high level of peace and security. From the 1570s – by which time Akbar had consolidated his empire – for more than a hundred years the greater part of India enjoyed such freedom from war and anarchy as it had not known for centuries. This long period of tranquility ended only with the violent outbreaks in the last phase of Aurangzeb's reign. The economy of the empire derived direct benefits from this altered state of peace and security.[2] Substantial increase in trade, both inland and foreign, was rendered possible by this development. It would perhaps be an exaggeration to say that the Mughal age saw the emergence of an integrated national market. Still, the commercial ties which now bound together different parts of the empire had no precedents. The trade links between Gujarat and Bengal, with regular exchange of cotton and raw silk between the two regions

[1] Richards [467].

[2] For the level of security on the trunk roads, see chapter XI.

or the carting of textiles from Agra and beyond to Ahmedabad and Broach for bleaching and dyeing, would have been hardly viable in the absence of the Mughal peace. The Bengal coast, long out of bounds to most traders native and foreign owing to anarchic conditions and the stranglehold of the local Portuguese, once more became accessible following the province's integration into the empire. The effort to consolidate the central authority led to a proliferation of administrative centres, mostly urban in character. So extensive was this development that in all probability the ratio of urban to total population under the Mughals was higher than in the nineteenth century. The urban centres were like so many nodules in the countrywide network of trade. If the collection of revenue in cash had generated a pressure to sell, the urban centres provided the markets which rendered viable the agricultural production for the purposes of exchange. The imperial and provincial capitals were vast markets for goods and services. Agra, once no more but a 'bourg' indistinguishable from its neighbours, emerged as the major emporium of north India's trade through which all the trunk routes passed. Akbar's declaration that it would be the seat of his empire 'was enough to People it, for when the Merchants came to understand that the Court was there, they came from all parts'.[1] In Mughal India trade followed the flag very closely. In the Deccan, Daulatabad was 'a place of great trade', but later the trade was 'at Aurangabad, whither King Auran-Zeb used his most endeavours to transport it, when he was governor thereof'.[2] Similarly, in Bengal Rajmahal lost her considerable trade while Dacca flourished when the capital was transformed from the one to the other.[3]

If one accepts without qualification the contemporary statements regarding the merchants' 'debasing state of slavery' in the Mughal empire, the fact of a very buoyant trade becomes difficult to explain. Ovington's description of the *baniyā* living in fear and servitude is typical of a hundred others:

Their Wealth consists only in Cash and Jewels, the distinction of personal and real Estate is not heard in India and that they preserve as close and private as they can, lest the Mogul's Exchequer shou'd be made their Treasury. This curbs them in their Expences, and awes them to great secresie in their Commerce, especially in their receiving of Payments of Money, for which they either make use of the darkness of Night, or the obscurity of the Morning, in conveying it to the place of Payment. For should the Mogul's Officers see the Chests and Bags of Gold and Silver carried as publickly here as they are in the Streets of London, they would be apt to change their Owner.[4]

[1] Thevenot [103], 47.
[2] Thevenot [103], 107.
[3] Tavernier [104], I, 102.
[4] Ovington [108], 187.

Our sources are full of specific instances of tyranny which support such general statements. From the receiving end, we have the evidence of the Jain merchant, Banārasīdās. He writes of jewellers being thrashed with 'thorny whips' by the *jāgīrdār* of Jaunpur who demanded what 'they did not have'. Banārasī's ancestor Muldās, had a Mughal nobleman as his patron; on Muldās's death, the patron 'turned the mother and son out and confiscated their wealth'.[1] Even leading merchants like the brokers of the London East India Company and a son of the famous Parsi trader of Surat, Rustam Mānak, were subjected to corporal punishment and torture for no fault of theirs.[2] When Sulṭān Parvīz was appointed governor of Patna, his mere presence caused a dislocation of trade, since no one wanted to appear to have any money.[3] For similar reasons at the news of Akbar's death, Banārasīdās wrote, at Jaunpur, 'it became difficult to distinguish between high and low, and the rich and poor resembled one other'.[4] A constant sense of insecurity and fear is almost the keynote of this trader's autobiography.

The forms of extortion ranged from straightforward plunder to ostensibly legitimate taxation. Presents for the officers and their minions – demanded and extorted with persistent regularity – appear to have been very much a part of the normal expenses of trading. Appeals for redress to higher authorities were worth little unless accompanied by presents. 'By reasons the Nabobs palace is in the City, and his servants and officers are constantly craveing one thing or another,' the English chief factor at Patna decided to live in another town.[5] Instances of merchants being thrown into prison for inability or refusal to give what was demanded were common enough. The loans taken from the merchants were not always returned.[6] Shā'ista Khān, who raised extortion to the level of high art, devised the ingenious technique of forcing loans on merchants at 25 per cent per annum and recalling capital and interest at the full annual rate after six to eight months so that the actual interest paid could be as much as 50 per cent. Forcing merchants to buy goods 'at 10 to 15: per 100: higher than the marketts for time' was another favourite trick of his and other nobles taking a hand in trade.[7] Then, there were frequent dangers of the emperor or one of his nobles establishing monopolies over particular commodities, like indigo at Agra in the 1630s and saltpetre in Gujarat in 1655.[8] At times, these were simply an indirect form of taxation, with the

1 *Ardha-Kathā* [169], (trans.), I, 52, 58, (text), 6, 13.
2 See: Sarkar [475], 367; Kaiqubad [165] (ed. Modi), *Asiatic Papers*, IV, 104–5.
3 Mundy [103], 363–4.
4 Mundy [96], (text), 29f, (trans.), 66.
5 Temple [32], II, 89; *Dagh Register* [38] (1640–1), 310.
6 Valentijn [112c] IV, ii, 145; *English Factories* [297] (1670–7), 377.
7 Streynsham Master [32], II, 80–1.
8 *English Factories* [31], (1651–5), 299–300, 304.

monopoly leased out to some speculator who passed on the cost of the lease to the regular dealers besides charging monopoly prices. At every transaction involving the nobles or petty bureaucrats some palms had to be greased. The merchants had to dance attendance at the custom-house in Surat, 'till a right understanding be created betwixt the Shawbunder and them', which, to quote Fryer, 'commonly follows when the Fist is mollified'.[1] At Rajmahal, the Augustinian monk Manrique considered that he 'had done a great stroke of business' in finding himself free from 'the multitude of clerks' who eventually cleared his dues and gave him a passport, 'without which it was impossible to leave that riverain port'.[2]

Besides the various illegal exactions, the inland tolls and custom duties charged by the Mughal government could be heavy and vexatious. Writing in Aurangzeb's reign, Shihābu'ddīn Ṯālish commented that *ḥāṣil*, or custom duty, was collected 'from every trader, from the rose-vendor down to the clay-vendor, from the weaver of fine linen to that of coarse cloth', besides *zakāt* or one-fortieth of income charged on travellers, merchants and stable-keepers. That inland tolls had indeed become a great nuisance is strongly suggested by Ṯālish's no doubt exaggerated account: 'On the roads and ferries matters came to such a pass that no rider was allowed to go unless he paid a *dīnār* and no pedestrian unless he paid a *diram*. On the river highways, if the wind brought it to the ear of the toll-collectors that the stream was carrying away a broken boat without paying *ḥāṣil*, they would chain the river.... They considered it an act of unparalleled leniency if no higher *zakāt* was taken from rotten clothes actually worn than from mended rags.' The duties were undoubtedly heavy and abolished or reduced from time to time, one does not know how efficiently.[3] The *Mir'āt-i Aḥmadī* mentions that Aurangzeb abolished *all* road tolls, tax on foodstuffs and beverages. That the abolition was either very temporary or confined to only certain parts of the empire is proved by James Grant's reference to seven types of imposts current in Bengal in the eighteenth century. Perhaps the vexation and delay caused by the toll-posts were at least as great a hindrance to trade as the actual exaction. Between Aurangabad and Golconda, Thevenot came across sixteen 'tchongis' (*chaukīs*) or 'Guards of the High-ways' and many more between Aurangabad and Surat, while Manrique ran the gauntlet of six 'custom-posts or registration offices' in the city of Rajmahal alone. It is worth noting that Thevenot found the system mild and tolerable in its operation. The guards no doubt asked 'Money of Travellers,

[1] Fryer [107], I, 247–8.
[2] Manrique [98], II, 135.
[3] Sarkar [472], 263–4, 266 (1906), 423 (1907), (*Fatḥiyya-i 'Ibriyya* ff. 123b–4a, 128a–9a, 131b). *Ardha-Kathā* [167], (text), 247; (trans.), I, 221.

though it be not their due'; but, adds Thevenot, 'we gave to some and refused others, but that signifies no great matter in the whole'. Again at Broach the customs officers asked him if he 'had any Merchants-goods, and having answered then that I had none, they took my word, and used me civilly'.[1] At Surat customs merchants trying to hide gold to avoid paying customs ended up paying 10 instead of 5 per cent. Tavernier pointedly added that the punishment for such delinquency was not so severe as in Europe.[2] Custom duties were on the whole moderate, varying over time from 2½ to 5 per cent, the European companies generally paying less. The actual amounts collected depended a good deal on the personality of the officials concerned, for in practice levying of additional taxes was within the governors' powers.[3] Tolls under one name or another were in fact collected by local rajas, rebels and bandits as well: Peter Mundy paid *zakāt* to bandits on several occasions. Such exactions, however, had more to do with the problem of law and order than with the structure of administration or policy.[4]

In matters of taxation, beside the *jizya* – the incidence of which varied according to one's wealth and income – Hindu traders paid duties at the rate of 5 per cent while Muslims paid 2½ per cent. The duty on Muslims was abolished altogether by Aurangzeb. If we are to believe Manucci, the personal tax paid by the Hindu traders every year in advance nearly ruined them, to the great delight of Aurangzeb who expected their imminent conversion to Islam.[5] Despite such numerous exactions, trade was highly profitable as is evidenced by the great wealth of merchants and their impressive presence in virtually every part of the country. One explanation for the fact is to be found simply in the nature of the long-distance trade, which profited from the inaccessibility of the sources of supply and was concerned mainly with luxury or comfort goods. The rate of profit was evidently very high as in all pre-modern long-distance trade – high enough to absorb the cost of transport as well as the official and non-official exactions of the ruling class. The fact that the bulk of producers earned little more than mere subsistence must have helped sustain this high rate of profit.

To emphasize the exploitation of the traders by the state and the nobility is to ignore the *modus vivendi* that had emerged over time to the advantage of both the parties. 'After all, there are but Fines imposed at Surat, the People live there with freedom enough,' wrote Thevenot, while Bowrey noted how the merchants, mostly Hindus, lived 'for the most part in admirable Subjection to the Moors, payinge the King's

[1] Thevenot [103], 21, 103.
[2] Tavernier [104], I, 9.
[3] See, for instance, *Dagh Register* [38], (1640–1), 379.), 379.
[4] Mundy [96], II, 54, 111, 117, 255, 263.
[5] *Mir'āt-i Aḥmadī* [167], (text), 265–6, (trans.), I, 237, (supplement), 154, 158; Manucci [110], IV, 117.

taxes and duties to the uttermost farthinge'. Ovington followed up his categorical remark that the Hindus were 'often treated with inhumanity and neglect, because of their adhesion to the Principles of a Religion which is different from that of the State' with the following statement: 'And yet their peaceable submissive Deportment wins mightily upon the Moors and take off much of that scornful Antipathy which they harbour against them.'[1] The submissiveness which the European bourgeois observers, imbued with a new spirit of freedom, found insupportable perhaps came naturally to the merchants of an old, traditional culture adept in the art of survival. The merchants' relations with the state went beyond mutual sufferance. We find the caste organization of the Lumpaka sect asking Shāhjahān to intervene because the *mahājan*, to which the *Nagarseṭh* of Ahmedabad Shāntidās belonged, did not intermarry or interdine with them.[2] In fact, the traders exerted a fair amount of influence on the ruling class, directly and indirectly. As Fryer noted, most Muslim noblemen and merchants kept 'a Scrivan of the Gentues: on which account it is the Banyans make all Bargains, and transact all Money-business'.[3] In the train of the nobles there were 'always merchants under their protection', who passed 'all the Country over with their goods, buying and selling without paying customs'.[4] At times the spirit proved to be weaker than the flesh. In his twenty-fifth regnal year, the pious Aurangzeb had to re-impose the $2\frac{1}{2}$ per cent *zakāt* on the Muslim merchants, for the latter had graciously helped the Hindus to cheat the treasury under the cover of this exemption.[5] Earlier in his career, when Aurangzeb as viceroy converted *Nagarseṭh* Shāntidās's Jain temple into a mosque, Shāhjahān ordered its restoration to the founder.[6] Again, in Aurangzeb's reign the Surat merchant Rustam Mānak secured for the Parsis exemption from the payment of *jiziya*.[7] The merchants lending money to the nobles did not act exactly like sheep being led to slaughter. Normally, even a powerful noble had to provide security for the loan he sought.[8]

The popular image of the meek, unostentatious trader often did not conform to reality. The author of *Mir'āt-i Aḥmadī* referred to two suburbs of Ahmedabad as its 'two golden wings', 'inhabited by wealthy Hindus', who were 'millionaire bankers'.[9] The Gujarat merchants who could each buy up an entire ship's cargo or supply the entire annual investment of the European companies are repeatedly mentioned in our

[1] Thevenot [103], 29; Bowrey [106], 126; Ovington [108], 120.
[2] S. Commissariat [274] (*History of Gujarat*), II, 148.
[3] Fryer [107], I, 282.
[4] Master [32], II, 85.
[5] *Mir'āt-i Aḥmadī* [167], (supplement), (text), 298–9; (trans.), 266.
[6] S. Commissariat [274], (*History of Gujarat*), II, 142.
[7] Kaiqubād [165] (ed. Modi), *Asiatic Papers*, IV, 286.
[8] *Mir'āt-i Aḥmadī* [167], 169.
[9] *Op. cit.* [167] (supplement), 171–2.

sources. Surat's Ahmed Chelabi who lost his life playing high politics had 'nearly 2,000 Arabs and Rumis...always with him'.[1] Not all merchants tried to hide their wealth. At Agra, one Sabal Singh Sāhu was so 'intoxicated with prosperity' that his court 'resembled that of princes'.[2] One great merchant from Agra on his pilgrimage to Puri had in his train 500 soldiers, 12,000 sadhus and 500 servants to carry the baggage. He gave away Rs. 500 in alms every morning.[3] If the traders were generally submissive, striking cases of resistance were not unknown. The Surat *baniyās*' 'strike' in protest against a forced conversion to Islam in 1668–9 is the best-known of such incidents. Kapūrchand Bhansālī, *nagarseṭh* of Ahmedabad, 'employed nearly five hundred unemployed persons as *sawār* and *piyadā*' to resist the illegal exactions of Mahārājā Ajīt Singh's *nā'ib*, Anup Singh. 'Whenever the Marwar tyrants...dragged away a citizen, he sent his own men to rescue him by force.'[4] At Bagnagar, when Thevenot was there, the Hindu bankers shut up their offices in protest against an *amīr's* exactions until the emperor ordered restitution of the seized property.[5] Such instances could be multiplied. However, the central fact in the relationship between the traders and the state was that the imperial authorities were not indifferent to the former's fate and were aware of its relevance to their own interests. In 1663, Aurangzeb – normally a parsimonious monarch – celebrated the festival in which the king was weighed with 'extraordinary magnificence' so as 'to afford the merchants an opportunity of disposing of the quantities of brocades which the war had for four or five years prevented them from selling'.[6] How much influence the merchants could exert over imperial policy was shown clearly in 1619 when the Surat traders resisted English attempts to buy textiles for the Red Sea market and were fully supported in this by the emperor and his officials. The fact that the English encroachment on the Red Sea market would have adversely affected the *amīrs*' commercial interests was no doubt partly responsible for this unanimity.

The Mughal policy towards trade and traders reveals a peculiar contradiction built into the structure of the empire. The state power and the ruling class were essentially indistinguishable and the viability of the state was bound up with the prosperity of the country's trade as well as of its agriculture. The short-term interest of the individual *amīr*, however, lay in the direction of maximum extortion in the minimum possible time. Any awareness that such exaction was against their long-term class interest appears to have been absent. The trader, unlike the peasant, was, however, able to exert influence through

1 *Mir'āt-i Aḥmadī* [167], (text), II, 175f. (trans.), 522–3.
2 *Ardha-Kathā* [169], (trans.), 114.
3 Bowrey [106], 19.
4 *Mir'āt-i Aḥmadī* [167], (text), II, 34.
5 Thevenot [103], 135.
6 Bernier [102], 271.

contacts, bribes, organized action, and, perhaps above all, the spendthrift *amīrs*' dependence on credit. Hence, despite the ambivalences in official attitudes, the merchant flourished, while the peasant was reduced to bare subsistence.

The framework of policy within which European trade with India developed is discussed in chapter XIII. It has been suggested that a childish greed for foreign 'toys' or 'curiosities' and, generally, a steady flow of presents rather than any consistent or even conscious policy, guided the Mughals' relations with the European companies. The appetite for *peshkash*, or tribute, whatever the source, was no doubt insatiable. But there is plentiful evidence which indicates an awareness that any expansion in foreign trade was to the good of the realm. With the empire's continuous need for bullion – which was not produced in India – anything else would have been unnatural. The fact that the European companies paid customs at a relatively low rate cannot be ascribed simply to the presents they offered: the Indian tycoons' competitive ability in that sphere was formidable. What is worth noting in this context is that the Indian merchants themselves never objected to this policy of discrimination, partly because to a certain extent the Indians and Europeans catered to different markets. Where this was not the case, the Europeans' trade expenses were so high that a lower rate of custom duty did not constitute a handicap for the Indian traders, especially since exactions by local officials amply made up for the reduction in rates. When the merchants felt threatened, as in the well-known case of the English investments for the Red Sea market, king, nobles and traders put up a united resistance. Only, with the Mughal weakness at sea, the imperial government felt helpless against the 'owl-like hat-wearers' and often had to climb down.

The acceptance of the principle that Indian traders sailing on Asian waters must carry passports from the Europeans – first incorporated in treaties with the Portuguese – formalized the Mughals' naval inferiority. In so far as the European factories – until they developed into fortified settlements – were at the mercy of the Mughal, there was a balance of threats. Only rarely did the tussle with the over-mighty foreigners develop into a hot war: the most noted instance is the war with the English in Bengal (1686–90). In the eighteenth century, the servants of the English company started their notorious abuse of *dastaks* in Bengal. The passes which allowed them to transport, without search, commodities connected with the overseas trade were being used illegally as a cover for tax-free entry into inland trade, out of bounds to all foreigners. The Nawab's government tried hard to protect the local traders threatened by this illegal and unequal competition. 'These merchants', 'Alīvardī once wrote to the English, 'are the kingdom's

benefactors, their imports and exports are an advantage to all men'.[1] The policymakers had a clear awareness of what was at stake. By the 1740s, the road to Plassey already lay open.

It is usually assumed that the decline of the Mughal empire was accompanied by a general decline in the economy of India. The correctness or otherwise of this assumption can be tested only on the basis of detailed research into the economic condition of the different regions during the first half of the eighteenth century. Our knowledge of what happened then is still very vague.[2] The belief that the collapse of centralized authority invariably meant anarchy is, of course, not correct. There is little reason to think that Oudh and the eastern *ṣūbas* as virtually independent kingdoms were worse off than before. The extensive speculation and farming out of the *khālīṣa* that characterized the imperial administration under Jahāndār Shāh and Farrukhsiyar affected only the relatively small area under imperial control. Two economically important regions – Gujarat and the Deccan – suffered heavily, as a result more of Maratha depredations and the side-effects of the war against the Marathas than of the weakened hold of Delhi. Manucci's impressionistic estimate of the annual toll in human and animal lives – 100,000 and 300,000 respectively – taken by Aurangzeb's war in the Deccan, indicates the magnitude of the disaster. The Mughal army always had in its train the *bīdarīs*, 'privileged and recognised thieves' who first plundered the enemy territory of everything they could find. This ingenious system of military supply was carried to its logical extreme by the Marathas who never carried any provisions on their campaigns. If wars and their side-effects were the crucially negative features for the economy in the last phase of the empire, one has to remember that the history of Mughal India is an annal of continual conquests. The fate of Golconda during the invasion – with 'unpaid Quṭb Shāhī cavalry and foraging Mughal troops' burning and looting everywhere, or of Bengal during a campaign of pacification when a Mughal official proudly taught the people 'what is meant by looting' – was perhaps not all that different from that of Deccan during Aurangzeb's campaign, except that the latter, as well as the Maratha depredations, covered a longer time-span. As to the net effects of imperial decline, one can perhaps suggest a very tentative hypothesis. Probably the greater part of the sub-continent – where the administrative structures set up by the Mughals continued as before for good or evil – was not affected very much one way or the other. The Deccan and Gujarat probably suffered a long-term decline. Certain

[1] *Fort William – India House Correspondence* [34], (11 January 1749).

[2] For a discussion of the available evidence, see chapter 1 in Vol. 2 of this work.

branches of the inland trade, like the supply of raw silk to Gujarat, was disrupted. One wonders, however, if this was not due more to the situation in Gujarat than to any new barriers to inland commerce. For those conducting inland trade had learned over time to adapt themselves to war and temporary anarchy. The insurance rates for commodity transport during Aurangzeb's Deccan wars were only 1 to 1½ per cent. When the Sikh wars blocked the route to central Asia via Lahore, caravans were simply diverted through Najibabad and Kashmir. If manufacturers suffered in one area owing to war or loss of patronage, the artisans migrated to other centres like the flourishing towns of eastern Hindustan or the European factory towns on the coast. In short, the conclusion that the economy of the sub-continent as a whole was on the decline is not justified. The unification of India under an imperial authority – however extortionate its demands – had established a structure of systematic government and a new level of security which stimulated trade, manufactures and production of cash crops. Most of these effects survived the empire's decline. The loss suffered through the wars attending the fall of the empire have to be balanced against the effects of the wars of conquest.

2 Maharashtra and the Deccan: a Note

The states dominating the Deccan during the period under review may be divided into three groups: the Deccan Muslim kingdoms (especially the Niẓāmshāhī kingdom of the western Deccan for 1489–1636, the Quṭbshāhī kingdom of the eastern Deccan for 1512–1687, and the 'Ādilshāhī kingdom of the southern Deccan for 1489–1686); the Maratha kingdom of the western Deccan since the middle of the seventeenth century; and the Mughal empire which annexed the Muslim kingdoms one after another and finally shared the hegemony over the Deccan with the Marathas since the beginning of the eighteenth century.

Although the purpose of this chapter is to point out and analyse the impacts of the administrative system, policies and political conditions of the states on the economy of the Deccan, the discussion cannot but be sketchy due to the paucity of information.

PEACE AND SECURITY

Although the peace and security in the Deccan was often disturbed by wars between the Deccan Muslim kings, Mughals and Marathas as well as famines and droughts as discussed in chapter xv[1] there was a fairly elaborate military bureaucracy from the centre down to the village to

[1] See the discussion on the famines and wars in the Deccan in chapter xv.

maintain the peace and security in the state throughout the period. Muslim kings, Maratha rulers, and the Mughal governors of the Deccan all appointed a military administrator (called *faujdār* or *ḥavāladār* in the Muslim states, and *mamlatdār* by the Marathas) in each district, and a commander at every fort along with a contingent to protect the security of the region. Similarly a police magistrate called *kotwāl* would be appointed at the capital and other major cities. Then a police contingent named *thānedār* would be posted at every town and large village located in crown districts. High-class officials who were assigned with the revenue from a certain area used to send their own contingent to protect their assigned area.[1]

In the countryside the hereditary chief (*deśmukh* or *desāī*) of a sub-district and the hereditary headman (*pātīl* or *mokadam*) of a village was responsible for the security in the area under their charge. And usually every *deśmukh* and sometimes even a village headman maintained their own militia for that purpose. It is interesting to note that in the eighteenth-century Maratha kingdom, and possibly even in the earlier kingdoms of the Deccan, there was a custom to recruit members of 'criminal tribes' as policemen at cities and districts so as to prevent theft and robbery of such tribes. The case was more or less the same with the watchmen employed by village communities. And when the police officers in charge of a city or a district, as well as the watchmen of a village, were unable to arrest a thief or other malefactor, they were to compensate the value of property stolen in the area under their charge. Or the inhabitants of the town or village to which the offence was clearly traced were responsible for the same.[2]

Despite such an arrangement for internal security, people were sometimes plundered by the very officials in addition to the damages caused by wars and famines. For instance, a Dutch merchant reported on the Quṭbshāhī kingdom in the early seventeenth century to the effect that the people pretended to be poor, for 'no prosperous person dares to let the fact be known for fear of the Governors [*sic*], who lightly take all they have on some petty claims'.[3] In the middle of the century a French traveller observed at Hyderabad that the nobles of the court sometimes squeezed the rich; while he was staying there a noble detained a Hindu banker and made him give up a large amount of money, but the bankers of the city shut up their shops as a protest at this extortion, and the king commanded all to be restored to the Hindu, and so the matter was settled.[4] Especially the death of a king sometimes caused a civil war and urban looting by officials. In 1673 for instance,

[1] Shyam [499], 371; Richards [467], 76, 85–97; Sherwani [498], 509; Fukazawa [304], 56–8, 63–4; Sen [486], 424–32, 522–3; Fukazawa [307], 105, 127–8.

[2] Sen [486], 424–6, 649–50; Fukazawa [304], 48.

[3] Moreland [89], 77.

[4] Sen [103], *Indian Travels of Thevenot and Careri*, 135.

a French traveller noticed at Raybag in the 'Ādilshāhī kingdom that the death of 'Ādilshāh II, which had taken place the previous year, had caused several rival factions to fight. The governors of the provinces had taken advantage of this turn of events and started pillaging the towns in such a way that the inhabitants and merchants had to leave them, because of the immense sums of money which were instantly demanded from them, and the governor of Raybag had sealed all the houses and shops of the local merchants, and forbidden them to be opened on pain of death, until the merchants had paid him an enormous sum of money. But the merchants were so terrified by this action that they preferred to abandon their houses and merchandise rather than to live under the tyranny.[1]

Though the observation of foreign travellers may have tended to exaggerate what took place in fact, such disturbance of internal peace and security must have occurred now and then causing the temporary dislocation of normal economic life of the affected people whether in the urban or rural areas. Apart from such disturbances, urban life as well as long-distance travel was not always safe. For instance, even in Shivājī's dominion, which is supposed to have been ruled by a strict, centralized, autocracy, cities and towns were sometimes raided and plundered, and travelling merchants had to form a group and at any rate employ from several to dozens of armed men to protect their life and property.[2] At the same time it must also be mentioned that in the early seventeenth century the road from Masulipatam to Hyderabad was evidently safe.[3]

At any rate grave disturbances of internal security do not seem to have been frequent, and the level of peace in the Deccan does not seem to have been obstructive of the economic activity of the people, for there were many large and prosperous cities throughout the period, and by and large both domestic and foreign trade flourished in normal times.

MUSLIM STATES AND LAND REVENUE

The first important personage pertaining to the agrarian policy in the Deccan during the period under review was perhaps Malik 'Ambar, the prime minister of the Niẓāmshāhī kingdom (1604–26). He is believed to have abolished the farming of land revenue collection, and initiated a system of glance-survey (*naẓar pāhanī*), probably a modification of the Mughal system of north India. Under the system the cultivable land was first glance-surveyed and then divided into irrigated land (*bāghāt*) and

[1] Carré [105], I, 233–4.

[2] Kulkarni [387], 206, 212–13, 215. There were special groups of people called *banjāras* who would carry goods for long distances.

[3] Sherwani [498], 416.

dry land (*zirā'at*), and the latter was divided into four classes according to the quality of soil. Again, both irrigated and dry land were classified into *khāliṣa* (fully assessed) and *in'ām* (exempted). Then the maximum rate of land revenue on *khāliṣa* was possibly decided between one-fourth and two-thirds of the produce on different classes of soil. Choice of payment in kind or in cash was left to the peasants. As the various cesses were also collected in addition to land revenue, the maximum burden upon the peasants must have been more or less higher than indicated by the above figures. It is also stated that he deprived the hereditary officers of sub-districts (such as *deśmukhs* and *deśpāndes*) of their intermediary function in the collection of land revenue, while leaving them to enjoy their customary rights and perquisites such as *in'ām* villages and *in'ām* lands, got the formal collectors to contact directly with the village headman, and recognized the private ownership of land by the peasants.[1] At any rate the above system introduced by Malik 'Ambar was to be followed later by the Marathas.

Though the details of land revenue farming as abolished by Malik 'Ambar in his kingdom are not clear, a similar system was widely practiced in Quṭbshāhī kingdom perhaps in the most acute form both in the crown and the assigned territories, itself an indication of the inefficiency of the Quṭbshāhī bureaucracy. In most crown districts of this kingdom, the collection of land revenue and other taxes was farmed out to a chain of the maximum bidders, usually local Brahmins, on a short-term tenure, often for a year. Similarly high-class bureaucrats leased out the collection from their assigned areas to a series of lessees. There is no doubt that this system often led to rapacious demand on the peasants. But at the same time it appears that this was successfully mitigated and resisted by the maximum rate of collection at half the produce on the one hand, and by the local *zamīndārs* and village communities on the other in the normal times. For agriculture was by and large prosperous in this kingdom.[2]

After the eastern Deccan was annexed to the Mughal empire with a more efficient bureaucracy, the farming of revenue collection was generally replaced by the collection through official collectors. But more strict assessment of revenue as well as the fresh imposition of capitation tax (*jiziya*, abolished in 1722) at the rate of 4 per cent of assessment seems to have considerably increased the tax burden on the peasants although the full collection was almost always difficult, and the revenue had to be more or less remitted every year.[3]

[1] Radhey Shyam, *Life and Times of Malik Ambar* (Delhi, 1968), 153–6.

[2] For details see: Moreland [89], 54–7, 76, 81–2; Sen [103], *Indian Travels of Thevenot and Careri*, 143; Richards [467], 13–14, 16, 21–6.

[3] Richards [467], 137–8, 178–85, 198.

RISE OF THE MARATHAS

Unlike the Mughal *jāgīrdārs*, the big assignees in the Deccan Muslim kingdoms exercised wide administrative powers in their assigned territories, which tended to become hereditary, unchecked by the central authority. Such a case was particularly true with Shāhjī Bhonsle's *jāgīr* of Poona, where his son Shivājī consolidated his authority since the middle of the seventeenth century. Then he rapidly extended his territory along the Western Ghats, and established his kingdom in 1674. His early lieutenants and supporters were mostly recruited from the *deśmukh-zamīndārs* and their followers of the Maval areas (hilly areas in the Western Ghats), though he ruthlessly exterminated some of them who did not admit his leadership.[1] This fact forms the basis for characterizing the rise of the Marathas as the rebellion of *jāgīrdār-zamīndār* alliance against the Muslim dominance of the Deccan.

Perhaps the most important economic background for the rise of the Marathas was the decay of agriculture caused by the incessant fighting between the Mughals and Niẓāmshāhī and 'Adilshāhī dynasties, as well as the great famines of 1630–2. Many peasants affected by such calamities seem to have flowed into Shivājī's territory,[2] and Shivājī seems to have treated his people with leniency on the one hand, and recklessly drained the wealth from foreign territories through periodic expeditions called *mulkgīrī* on the other.[3]

Shivājī is said to have been strongly opposed to granting *jāgīr* to his high-class officials inside the home country (*svarājya*), though he sometimes had to give them *saranjām* or *mokāsā* (Persian, *muqāsa* assignment, perhaps equivalent to three-fourths of tribute called *chauth* from foreign territories) to be exacted from enemy countries. But such an assignment was not hereditary.

LAND REVENUE AND *CHAUTH* UNDER SHIVAJI

Regarding the land-revenue system, Shivājī mostly followed the pattern introduced by Malik 'Ambar: doing away with revenue collection through hereditary officers of sub-districts, direct contact with village headmen through official collectors, and classification of land into four classes. Besides, he introduced the measurement of land by means of rod towards the end of his life at least in some parts of his kingdom, and the maximum revenue rate seems to have varied between one-third

[1] Sharma [494], 79, 123–33. Also refer to Chandra, 'The Maratha Polity and its Agrarian Consequences' in: Prasad [450], 181.

[2] Rawlinson [24], I, 44–6.

[3] Moreland [424], 258. Tavernier noted, Shivājī 'was both wise and liberal, ----- the soldiers flocking to him from all parts, for the reputation of his liberality'. Tavernier [104] (1), I, 48.

and one-half of the produce. As a matter of course, peasants as well as merchants and artisans had to pay a number of cesses, so that total maximum burden probably amounted to a half of the produce, after deducting various village expenses.

During his life, Shivājī is said to have captured or built nearly 240 forts scattered throughout his territory and manned with 200,000 soldiers (at the time of his coronation), and he maintained about 400 navy ships.

To maintain such a large number of forts and a fleet, the revenue from his tiny kingdom was by no means sufficient; he had to resort to frequent expeditions to foreign countries, and exact one-fourth (*chauth*) and one-tenth (*sardeśmukhī*) of the revenue thereof, which were of the nature of tributes paid by local governors and chiefs of the enemy territories.[1] It is stated that at the time of coronation Shivājī's kingdom yielded about Rs. 30 to Rs. 40 million, while the *chauth* when fully collected added another Rs. 8 million to his revenue.[2]

Though it is difficult to estimate the exact economic impact of the Maratha raids and exactions on foreign territories during Shivājī's period and up to the early eighteenth century, they may safely be stated to have been the most significant economic cause for the decline of the Mughal empire in the Deccan.[3]

DECENTRALIZATION AFTER SHIVĀJĪ

While Shivājī's administrative system was a highly centralized autocracy, what took place after him was characterized by decentralization. For the twenty years after the Mughals murdered Sambhājī, Shivājī's eldest son in 1689, Maratha military chieftains resorted to guerrilla warfare against the Mughals, and captured Mughal territories wherever possible. When Shāhu declared himself the king of the Marathas at Satara in 1708, he had to recognize these Maratha chieftains as his hereditary *jāgīrdārs*. Moreover, his own generals invaded and captured some territories in the Deccan and Gujarat, and were recognized as his feudatory states (e.g. the Bhonsles of Nagpur). In the central government, too, Shāhu's ministries and high-class offices became hereditary, along with their respective *jāgīrs* or *saranjāms* inside the *svarājya*, in addition to a certain cash salary. Especially the hereditary prime minister (Peshwā) established his own government at Poona, which was *de jure* subordinate to, but *de facto* dominant of Satara; hence a dyarchy at the

[1] For the above discussion see: Sen [486], I, chapters 1–4.

[2] Kulkarni [387], 133–4.

[3] Y. H. Khan, ed. [17], Persian text, 161–2; Y. H. Khan, ed. [13], 77, 87, 91. Also see the portion on famines and wars of chapter XIV of this volume.

central government. Also the Peshwā not only dispatched his generals to central and northern India and got them to occupy the territories of the decaying Mughals (hence other feudatory states such as the Holkars of Indore and the Sindes of Gwalior), but also assigned numerous *jāgīrs* to his officials inside the *svarājya*.

Of this new type of state structure in Indian history, the so-called Maratha confederacy, the kings at Satara were only nominally the heads, and the Peshwas at Poona were in power for all practical purposes. They ruled over the *svarājya*, and beyond it a number of Maratha feudatory chiefs administered their own territories, with the obligation to pay homage and a certain tribute to the head of the state, and to provide military force for the state in emergency.[1]

During the first half of the eighteenth century the Maratha confederacy achieved its zenith of power, ruling over vast territories in western, central and northern India. This political achievement contained the seeds of grave economic consequences, just as the Mughal empire started declining at its peak during Aurangzeb's reign. First of all, the granting of the *jāgīrs* and *saranjāms* inside the *svarājya*, in addition to the military expenditures for invading Mughal territories, caused chronic financial difficulty to the Poona government, so that when the third Peshwā succeeded to the office in 1740, a debt of the order of Rs. 1.45 million was accumulated at the central exchequer.[2] In order to liquidate it the Peshwā resorted to predatory expeditions to south India as well as to Rajasthan, but they caused more expenditure, so that the financial condition of the Poona government became worse to the extent that when the Peshwā died in 1761 the debt accumulated by the government is estimated variously to have amounted to Rs. 1.7, Rs. 5, or Rs. 10 million.[3] To mitigate the difficulty, the Poona government naturally raised the maximum rate of land revenue to two-thirds of produce at least in some regions, such as Junnar, about 1742.[4] In addition, as discussed in chapter IX, the government vigorously encouraged the cultivation of state land and waste land by offering favourable terms to peasants. But this measure seems to have occasioned the 'de-nationalization' of the Maratha army, native soldiers being replaced by foreign mercenaries, an important military cause for the subsequent decline of Maratha power.[5] Simultaneously it became a habit of the Poona government to borrow a large amount of money from rich merchants and wealthy citizens whenever necessary, and grant them the government posts and the right to collect the revenue from the people,[6] a habit which would ultimately lead to the wide revival of the rapacious

[1] Sen [486], II, chapter I.
[2] Sinha [511], 217.
[3] Sardesai [471], II, 459.
[4] Parasnis and Vad [26], III, no. 327.
[5] Fukazawa [305], 56–60.
[6] Prasad [450], 188.

system of revenue farming, causing the economic ruination of Maharashtra towards the end of the eighteenth century. The Maratha feudatory chiefs are likely to have followed a more or less similar course.

OTHER AGRARIAN POLICIES

We shall now turn to some other aspects of agrarian policies adopted by the rulers of the Deccan. Whether or not they held a sustained interest in the development of irrigation facilities in their respective territories, the rulers of the Deccan not only constructed the canals and tanks for royal gardens,[1] but also, at least now and then, promoted the repair or construction of tanks, dams, and canals for agricultural purposes. Whereas even the approximate size of the irrigated area in the Deccan during the period under review cannot be ascertained, it is known in the eastern Deccan for instance, where the dam- (or tank-) canal irrigation was more prevalent than that of wells due to the soil condition, that ancient rulers constructed several large-scale tanks, and Ibrāhīm Quṭbshāh renovated one such tank in 1551, and divided the income from lands thus irrigated among the royal treasury, religious bodies and peasants.[2]

In the western Deccan, too, where the wells often dried up during the summer, dam- (or tank-) canal irrigation seems to have been more common. During Shivājī's period he sometimes encouraged the people to construct new dams or repair old ones, and granted a plot of *inām* (Persian, *in'ām*) land to the headman who led such an undertaking. But it is not clear whether the government bore the expenditure for the undertaking.[3] In eighteenth-century Maharashtra, the Peshwā government often encouraged the construction of dams and canals since the middle of the eighteenth century; the government would bear the necessary cash expenditure (in the form of revenue deduction) for the lime, stone and wood, as well as for the wage paid to skilled artisans such as masons and carpenters, while the villagers provided free unskilled labour for the construction. Sometimes the individual peasants who would directly benefit from the irrigation shared the expenditure with the government, and the village headman who organized such an undertaking was granted in *inām* a plot of land irrigated by it.[4] Other important measures, which the rulers of the Deccan adopted to promote cultivation, were concessional assessment (*istavā*), loans with a low or no interest (*taqāvī*), and remission of land revenues.

Istavā was a method of revenue assessment, in which the rate was very

[1] Shyam [499], 372–4. [2] Richards [467], 4, 11. [3] Kulkarni [387], 87–91.

[4] See: Kotani's Japanese article, 'Irrigation Problems in the Eighteenth Century Maratha Kingdom' in: Matsui [411a], 73–92.

low at the beginning, progressed annually, and reached the maximum assessment after several years. This was combined with *taqāvī* and adopted particularly for the extension of cultivation or colonization of waste land. Thus, for instance, when Shāhjī entrusted his desolate *jāgīr* of Poona to Dādājī Kondadev, the latter induced the hill people of the Western Ghats to clear the jungles and settle down on the land by offering *istāvā* assessment for eight years. And such a colonization was usually undertaken by the *deśmukh* of the area.[1] Similarly, Shivājī often advised his local collectors to give free loans to the peasants to buy seeds, cattle and other implements, repayable in instalments.[2] In the eighteenth century, when the Peshwā government vigorously promoted the cultivation of waste land through local officials, the *istavā* method was adopted in various parts of Maharashtra.[3]

The remission of land revenue seems to have been resorted to in case of devastation caused by war, famine, and failure of crops throughout the period. Indeed, it seems that more or less remission was made almost every year; in many *parganas* of the Mughal Deccan, the actual collection of land revenue ranged somewhere in between one-third and two-thirds of the maximum assessment towards the end of the seventeenth century.[4]

In short, whereas the maximum rate of land revenue appears to have been almost always excessive throughout the period, it was mitigated by the actual remission of revenue. Moreover, the governments adopted such measures as *istavā* and *taqāvī* when necessary, and occasionally promoted the construction of irrigation facilities in normal times.

STATE AND COMMERCE

There were several hindrances to the free development of commerce which were caused by government. Firstly, when overseas merchants and possibly even those belonging to other kingdoms wanted to do business in a kingdom, they had to obtain the permission from the king, and from the assignee in case the area had been assigned to an official.[5] Secondly, the kings and nobles of the Muslim kingdoms of the Deccan at least, used to monopolize or corner certain specific commodities such as pepper in 'Ādilshāhī and dyes called 'chay' in Quṭbshāhī kingdom.[6] Thirdly, a passport had to be obtained whenever one wished to make a journey.[7] Fourthly, and specially obnoxious for merchants, were the various duties or taxes demanded at a number of places: *zakāt* (transit

[1] Kulkarni [387], 98–9.
[2] Kulkarni [387], 162–4.
[3] Fukazawa [305], 58–9.
[4] Richards [467], 180–2.
[5] Foster [31] (1618–21), 19; Van Twist [97], (trans. Joshi), 127–8.
[6] Van Twist [97], (trans. Joshi), 127–8; Moreland [89], 35.
[7] Van Twist [97], (trans. Joshi), 117; Sen [103], 131; Kulkarni [387], 213.

or custom duties) to be paid at the entrance to different kingdoms and even the jurisdiction of different nobles, octroi or market duties to be paid at the places of sale, and cesses to be paid to officers of the market. These various taxes and duties were paid in cash or in kind as a certain portion of the goods, though there seems to have been no uniform scale for them in any kingdom.[1] And fifthly, though every king had his coins issued at the mints located in his kingdom, there was no unified system of coinage in any kingdom; coins issued by previous dynasties as well as by other kingdoms were all current side-by-side with those issued by the ruling dynasty, and they were exchanged with one another at their intrinsic value. For instance, in the early nineteenth century when the British conquered the Maratha confederacy they found at least thirty-eight kinds of gold coins and 127 kinds of silver coins circulating in the Bombay Presidency alone,[2] apart from various copper coins and cowries.

Against these hindrances, there should be noted several important policies meant for promoting the commerce in the Deccan. For instance, it was a custom of the kings and nobles to establish and maintain caravansarais at important cities and towns. Then the rulers often promoted the establishment of markets in cities, towns, and large villages. The merchant who undertook to start a new market would be appointed the hereditary headman (*śete*) of the market, and along with him there would be a separate hereditary accountant (*mahājan*) thereof. They were entitled to collect certain customary perquisites from all the merchants and shopkeepers working at the market, and often to own certain plots of *inām* land on the outskirts of the town. Merchants and shopkeepers who came to work at the newly established market were as a rule exempted from the regular customs and octroi duties to be paid there.[3] Especially Shivājī is stated to have believed in the principle: 'Merchants are the ornaments of the kingdom and the glory of the king. They are the cause of the prosperity of the kingdom. All kinds of goods which are not available come into the kingdom. That kingdom becomes rich. In times of difficulties whatever debt is necessary is available. For this reason the respect due to merchants should be maintained. In the capital market great merchants should be induced to come and settle.'[4] And possibly because of this policy the Gujaratis and Marwaris started to migrate into Maharashtra in the later seventeenth century,[5] as the indigenous merchants in the western Deccan were not very numerous. And finally medieval rulers of the Deccan were not always negligent

[1] Sen [103, 109], 131; Kulkarni [387], 111–17; Sen [486], 627–30. [2] Ranade [459], 192.
[3] Kulkarni [387], 204–5; Kotani [383a], 6–8.
[4] S. V. Puntambekar [25], 31, as quoted in Kulkarni [387], 206–7.
[5] Campbell *et al.* [254], XVII, 74; XVIII, Part 1, 273.

in the construction of trunk roads and creeks. For instance, in the early seventeenth century there were already well-maintained trunk roads from Masulipatam to Surat via Burhanpur, and from Masulipatam to Hyderabad.[1] In Shivājī's dominion, there seems to have been no trunk road as such; there were only pathways and short cart-tracks. But there were many creeks in Konkan, which were apparently constructed by the local authorities. In addition, a hereditary officer called *ghāṭpāṇḍe* was appointed at every *ghāṭ* between the Deccan and Konkan to protect the pass for passengers.[2]

In short, whereas there were certain political obstacles for commerce, the rulers of the Deccan also encouraged its development and, by and large, trade and commerce flourished in the normal times in the cities and towns.

3 The south

Three centuries separate the high point of Vijayanagara authority and the establishment of undisputed British rule in south India. The death of Krishnadevarāya in 1529 may be taken to mark the beginning of this troubled political era, and the British defeat, in 1818, of the Marathas, who had established an important presence in the macro-region during the late seventeenth century, is taken as the terminal date. In the historiography of the late- and post-Vijayanagara periods and the British period, these centuries are, with some justice, considered as a time of extreme disorder. This was engendered by warfare among the numerous indigenous political entities of the southern peninsula culminating in the brilliant expansion of the Mysore state of Hyder 'Alī and Tipū Sulṭān, and this warfare was exacerbated by the intrusion of powers from outside the region: the Deccani sultanates of Bījāpūr and Golconda, the Marathas, the Mughals, the Portuguese in the sixteenth and seventeenth centuries and the French and British in the seventeenth and eighteenth centuries. If it were to be argued that the performance of the south Indian economy depended upon stable state authority (and the British did so argue in justifying their rule in the eighteenth and nineteenth centuries), then it would be expected that the economy was a shambles for much of the entire period. But such a conclusion is unwarranted by the substantial, and increasingly diverse, extant evidence on the economy of the macro-region during the later medieval period.

The brunt of the incessant warfare fell upon certain sectors of society more than upon others. The older settled areas of productive agriculture probably bore heavier burdens of revenue demands to support local and supra-local military overlords. In such places, moreover, the burden

[1] Sherwani [498], 416. [2] Kulkarni [387], 208, 217–18.

probably fell unevenly upon rural groups, most onerously upon middle peasants deficient in political leverage and subject to escalating money demands. In general, it may be supposed that most of the groups of the right-castes – those most integral to agrarian production and trade in agricultural commodities – were principal losers by the changes of the time, while artisans and traders of the left-castes were relative beneficiaries. Many interior towns, especially those which had been centres of some minor local magnates also suffered. However, in the place of these often deserted, sometimes devastated, urban places arose new urban centres on the coast where European traders resorted and gradually built powerful bases of power. There were also interior towns which came to thrive as the political centres of '*nāyaka* kingdoms'. The salient point here is that while the sixteenth to eighteenth centuries were times of disorder marked by warfare and pillaging, this condition cannot be judged as being qualitatively different from the previous century of Vijayangara rule, especially in Tamil country where, as in parts of Karnāṭaka, repeated invasions by Telugu warriors had produced a high order of violence and uncertainty.

The decline of the Vijayanagara overlordship occurred in two stages, both marked by decisive battles. The first was the defeat of a great Vijayanagara army under Rāmarāja, son-in-law of Krishnadevarāya and a powerful minister of the youthful emperor Sadāśivarāya until 1563 when Rāmarāja usurped the throne. Shortly after successfully exacting a large tribute from the sultanates of Bijapur and Golconda, Rāmarāja was brought down by a coalition of these two states of the Deccan along with two other Muslim states, Ahmadnagar and Bidar in a battle on the Krishna river, at Tālikōṭa (or Rakshas Tangḍi). This defeat was followed by a sacking and abandonment of the capital city of Vijayanagara. Successively, the towns of Penukoṇḍa, Chandragiri, and Vellore became the capitals of the now retreating Vijayanagara rulers of the sixteenth century.

The second military setback occurred in Tamil country which had become, from the time of the Tālikōṭa defeat, the principal arena of Vijayanagara politics. The battle of Tōpur in 1616 was fought on the Kaveri near Tiruchirapalli and resulted from the festering conflict over the Vijayanagara throne between two sets of Telugu *nāyakas*. Though one of the candidates was killed at Tōpur, thus settling for a time the immediate succession conflict, chaotic political conditions endured until 1630.

From the point of view of the Vijayanagara overlordship, it is generally acknowledged that the civil war of the early seventeenth century was more significant than the defeat of 1565. This extended period of civil warfare among factions of the Telugu heirs of earlier

Vijayanagara power posed profound dangers for these established great magnates. Many resisted full involvement in the alignments preceding the 1616 battle and subsequently were loath to participate in any reconstruction of a political system such as that which existed under Krishṇadevarāya.

In fact, there could be no return to that earlier condition owing to two sets of factors, one politico-military and the other economic. Of the first, the resolve of the Muslim rulers north of the Krishna river to combine against the aggressive Rāmarāja was an important factor in the onset of the Vijayanagara decline. The defeat in 1565 and the necessity of leaving the great city of the Rāyas to the pillage of Muslim soldiery has been recognized by all Vijayanagara scholars as important in undermining the authority of the Rāya rulers after that time. However able some of the successors of Rāmarāja were, their military capability ultimately depended upon the collaboration of others. It is estimated that about three-quarters of the troops mobilized by Rāmarāja against the Deccani sultanates in 1565 were contributed and led by *nāyakas* from over the entire macro-region. Yet, all also recognize that this defeat itself diminished, but did not deplete, the ability of the Vijayanagara state to command the recognition, and, at times, the real support and cooperation of great warriors of the southern peninsula. Apart from the *nāyakas* of Thañjavur, the great *nāyakas* of the southern peninsula continued to profer homage to the Āravīḍu dynasty of Vijayanagara, and were not much less responsive, or obedient, to the calls of the later Rāyas for military support than such great men had been previously. This was true at least until the period of civil warfare, between 1616 and 1630. The failure to recover the earlier *élan* of the Vijayanagara state after Tālikōṭa must be attributed to a political factor other than military defeat. This was the obvious development of strong, competitive centres to Vijayanagara authority within the macro-region by the late years of the sixteenth century.

The seeds of this were sown in Krishṇadevarāya's time when, in the late years of his reign, another of the series of conquests of Tamil country (euphemistically treated by most historians as anti-rebellion campaigns) was undertaken by four of his leading commanders. The result of this incursion was that a large tribute was exacted from the northern portions of Tamil country and the whole of Tamil country was divided into three 'viceregal' territories under three of these commanders: one at Śenji, in modern south Arcot, under Tubāki Krishṇappa Nāyaka; a second in the Kaveri basin under Vijayarāghava Nāyaka; and a third at Madurai under Vēṅkaṭappa Nāyaka. Each of these laid the foundation for a so-called '*nāyaka* kingdom' of the next century.

The emergence of these kingdoms depended in turn upon two prior

and fundamental changes in the politics of the macro-region by the late sixteenth century. One was the perception of these able and ambitious Telugu military chiefs that something of a critical mass of Telugu settlers had come to exist in many part of the Tamil country, particularly in those areas abutting the more ancient, settled parts of Tamil heartland in the riverine basins of the Tamil plain. These well-entrenched settlers had assiduously maintained their Telugu ethnicity (language, Vaishnava religious affilitations, and caste identities) and served as a political base for the transformation of Telugu military chieftainships over what had been mixed Tamil and Telugu populations (small pockets of the latter among the former) into more ambitious kingships based still upon a mixed constituency, but one in which Telugu settlers attained more formal positions of subordinate power under new, Telugu, kingly houses.

The second factor was the reversion of Tamil country to the prime focus of south Indian political life. As a result of the military successes of the Deccani sultanates: 'the Tamiḻ country became the *Vijayanagar Empire*'.[1] This was evident immediately after the defeat at Tālikōṭa when Telugu and Karnāṭaka chieftains at Adoni, Bankāpur, and Dharwar, who had been among the strongest supporters of Rāmarāja and the earlier Vijayanagara rulers, claimed independent rule. Thereafter, the focus upon the Tamil country sharpened as the capital of the Rāyas shifted southward, reaching Vellore in 1592.

The civil war of the early seventeenth century merely confirmed the new political order. Independently-based Telugu *nāyakas* aligned themselves uneasily with one or the other of the royal factions with a view not of re-establishing the earlier Vijayanagara overlordship, but, rather, of achieving the best positions in which to maintain their independent power. The primary issue was scarcely whether the 'empire', which had come to consist of a number of powerfully established loci of power, was to be 're-centralized', for it had never been a 'centralized' polity. Rather, the issue was how each of these powerful personages was to achieve the best terms in the dangerous political atmosphere of the time. The civil war confirmed that the 'empire' as represented by the Vijayanagara throne essentially was no more.

As to the economic factors involved in the decline of the Vijayanagara state, it is difficult to determine whether, as a whole, economic changes were antecedent, and therefore causal, or consequent factors. The material bases for the '*nāyaka* kingdoms' as competitive loci of sovereignty was developed prior to the 'climacteric' military events of the late sixteenth and early seventeenth centuries. With no effective

[1] Krishnaswami [384], 270; emphasis in the original.

check from the Vijayanagara throne upon their private territorial jurisdiction except punitive military expeditions, and in any case charged with the maintenance of strong military capabilities, the independence of the great *nāyakas* was assured by the fortification of their territories, the maintenance of strong core military formations under their direct control, and the attraction of the homage of lesser Tamil chiefs and Telugu settlers. In this, the role of foreigners and foreign trade and a more complex and varied context of foreign trade was important.

The encouragement of foreign trade by the pre-Tālikōṭa Vijayanagara rulers was seen to be vital for the access which such trade gave these rulers to horses, firearms, and foreign soldiers. This explains a good deal of the success they enjoyed for two centuries. Therefore, the dispersal of Portuguese trade around the peninsular perimeter of south India and the addition, after 1600, of Dutch and British traders suddenly made the earlier royal control of this trade more difficult, if not impossible.

Efforts were made to control the dispersed Portuguese trade activities, but these were fruitless. In 1544, and twice later in the 1540s and 1550s, Viṭṭhalarāya, cousin of Rāmarāja, was dispatched to the Ramanathapuram coast to break the hold of the Portuguese over the place and its Paravā fisherfolk dating from the 1530s. The principal victims of these adventures were the Paravās who fled before the 'Baḍagas' (or 'northerners'). For a brief time, the Portuguese, who saw their ships destroyed and their priests and soldiers killed or driven off, retreated, but they soon returned. The purpose of these Vijayanagara actions was not simply to deny the Portuguese the extension of their zone of trade, including their horses, but to deny them as well the rich pearl harvest of that coast. In neither were they successful. Elsewhere, the results were the same. Treaties in 1631 and 1633 between the *nāyakas* of Ikkeri in western Karnāṭaka and the Portuguese provided for gifts of horses to the *nāyakas* as well as their continued sale by Portuguese traders. English merchants of the 1630s also sold Persian and Arabian horses in the Ikkeri territory.[1] The *nāyakas* of Madurai, in 1639, sought to induce Portuguese cooperation in a scheme to plunder Ceylon by offering the Europeans the right to construct fortifications in the kingdom and permission for missionary activities. They also were prepared to prohibit Dutch trade in Madurai. All of these concessions were presumed necessary to avert the intervention of the Portuguese against these designs of the Madurai *nāyaka* in Ceylon as had occurred when the *nāyaka* of Thañjavur undertook a similar raid upon Jaffna in the 1620s.[2] Commenting on the trade from Golconda around 1620, the English East India Company factor William Methwold, at the Krishna river port of Masulipatam,

[1] Swaminathan [527], 249, 251, 257.

[2] Danvers [278], II, 268.

reported that each year the sultan sent rice to Mecca and Medina to provision pilgrims from his kingdom and also sent a cargo of trade goods (tobacco, metals, and textiles), the earnings from which were used to purchase Arabian horses. Other Deccani sultanates did likewise.[1] There could be no question of controlling this varied and rapidly proliferating trade system around the southern peninsula.

The rise of new centres of power in the macro-region under *nāyakas* and their subordinates – *pāḷaiyakkāras* in Tamil, *pāḷegāḍus* in Telugu, and *pāḷegāras* in Kannada, 'poligars' to the British – while weakening the Vijayanagara state, did stimulate economic activity and development. Each of the great *nāyakas* became involved in a replication of the economic policies followed by the earlier Vijayanagara rulers and stated with trenchancy by Krishṇadevarāya, as quoted above. All erected fortified cities, great walled places with palaces, temples, market-places and artisan quarters; all encouraged internal and external trade. At Śeñji (Gingee) care was taken to provide separate residences, market, and work-quarters in which castes of the right and left had jursidiction.[2] There, and at other *nāyaka* capitals, the provision of water for town use and for the agriculture of the surrounding countryside led to construction of tanks and riverworks. Seven major anicuts were constructed on the Tāmbraparnī river during the *nāyaka* period in order to expand the area under irrigation in the southern part of the nayakdom of Madurai.

Each of the new cities became the centre of a segmentary state. Subordinate warriors – *pāḷaiyakkāras* – were linked to *nāyaka* rulers by bonds of ritual sovereignty in the manner of segmentary statehood. This is best exemplified by the arrangements at Madurai. Here, the founder of the kingdom, Viśvanātha Nāyaka, established an order of 'princes', the '*kumāravarkkam*', investiture within which was marked by solemn ceremonies, including food exchanges, signifying membership in the 'royal family' of the kingdom. He also appointed each of his followers to be custodians over one of the seventy-two bastions along the wall surrounding his capital.[3] The city thus symbolized the political order of the territory with each subordinate initiated into a brotherhood of military followers and appointed a station of support for the ruler in his palace within the walls of the city. Within the *pāḷaiyams*, or territories of each of the *pāḷiayakkāras*, their jurisdiction was private and complete.

Throughout the turbulent period from 1550 to about 1700, there are repeated references to the plunder of accumulated treasure. Sometimes this is stated by chroniclers and historians quite baldly as 'plunder', at

[1] Moreland [89], 37. [2] Srinivasachari [518], 88.

[3] Mahalingam, ed. [22], I, ('Tamil and Malayalam'), xxix and xxxii. References to these institutions are found on 122, 154, 171, 225, 238.

other times the euphemy 'tribute' is used. This was not a new phenomenon, of course. In the time of Krishṇadevarāya, as already mentioned, the Tamil plain was divided into three new provinces under an invading Telugu army, and extracted from the region were three crores of rupees according to a Tamil-language history, '*Karnāṭaka Rājākal Savistara Charitam*'.[1] Another Tamil literary work, the '*Koṅgudēśarājākkalin Charitam*', refers to an earlier campaign of the same king in Karnāṭaka resulting in seizure of one crore of rupees.[2] St Francis Xavier's account of the conquest of Vēnāḍu (southern Kerala) by Rāmarāja's kinsmen, Viṭṭhalarāya and his brother Chinna Timma, in 1544, refers to the plunder of the area and its dreadful aftermath.[3] Śrīranga III, in a last, futile attempt to resurrect the imperial polity of his Vijayanagara forebears, campaigned in the far south of the peninsula against the *nāyakas* of Madurai and Śeñji and the demand of one-third of the revenue of Madurai with devastating effect. Portuguese missionaries and Dutch traders in Thañjavur during the 1660s describe the famine and devastation of warfare there involving the *nāyaka* of Madurai, soldiers of the Deccani sultanates, and local Kāḷḷar warriors. One result of this chaos in Thañjavur is reported by Baldaeus, the Dutch emissary in Ceylon at the time. The Thañjavur port of Negapatnam was in a state of great confusion as starving people from the interior sought food and sold themselves into slavery. Five thousand of these unfortunates were transported to Jaffna, an equal number were sent to Colombo, and slightly fewer were sent to Batavia on Java.[4] Maratha raids in Thañjavur in the late 1650s and the early 1660s were accompanied by yet more plunder and, after 1675, when Venkajī established Maratha control in Thañjavur, treasure was regularly sent to his brother Shivājī to cover the new expenses of a now crowned king of the Marathas.[5]

That plunder and devastation should accompany warfare, especially the sustained warfare of the sixteenth and seventeenth centuries in south India, is not surprising. What is perhaps notable is that the large number of active political agents involved in these struggles should have been capable of accumulating the vast treasures which are reported at all sides as having been seized in the course of the warfare. The sources of these treasure hoards in the fortresses of the great warriors of the region represent a harsh skimming of the resources of their own territories and that of their neighbours. But this surplus appropriation implies a degree of monetization which is striking. Notwithstanding the disruptiveness of warfare and the suffering it inflicted, there was an obvious increase in cash transactions in agricultural and handicraft production.

1 Taylor [23], III, 34–41.
2 Sastri and Venkataramanayya [21], III, 100.
3 Krishnaswami [384], 230.
4 Sathianathaier [483], 76.
5 Sathianathaier [483], 76.

Here, the records of European missionaries and traders are most important. Even cursory study of the monographic and journal literature on the sixteenth to eighteenth centuries of the history of south India provide an impressive statement on the dynamism and responsiveness of the south Indian economy to the opportunities of profitable commodity production.[1]

As impressive is the extent to which European sources and views constitute basic evidence for historical research on the period. Epistolary evidence is given considerable prominence in the reconstruction of much of the seventeenth century. Reliance is placed upon this evidence of European priests and priestly administrators in part because of the connection between missionary activity and Portuguese political activities in the southern peninsula and also in part because the pastoral concerns of the often learned and dedicated priests, such as De Nobili in the early seventeenth century, shed light on aspects of social and cultural life not otherwise commented upon. Records of the Dutch and British traders, while less illuminating than Jesuit records on many social and cultural matters, provide a more continuous record of south Indian life pertaining to trade and the conditions of trade. Other important and new historical sources are the detailed reports of the first British administrative efforts outside of the established trade centres ('factories') such as *The Baramahal Records* from Salem of the 1790s[2] and the mixed corpus of accounts, chronicles, and *purāṇas* collected by Colin Mackenzie in the late eighteenth and early nineteenth centuries. Major reliance is placed upon the 'Mackenzie Manuscripts'[3] for the seventeenth and eighteenth centuries, and they figure as important sources for some of the historical research of the later Vijayanagara period as well.

This virtual explosion of historical sources shares the common characteristic of being foreign in their origins if not, as in the case of the Mackenzie materials, in their inspiration and selection. These sources share another common characteristic. They tend to portray a past in south India which was relatively stable; against which the stresses and crises of the time with which they deal are seen as disjunctive. This is most true with respect to the missionary and trade records; it is somewhat less true, but evident nevertheless, in the 'traditional accounts' of the Mackenzie manuscripts. The more measured and gradual tempo of change traced from inscriptions or from older forms of literary evidence upon which the history of the period from the thirteenth to the sixteenth century is based is lost in this newer evidence which tends to reflect changes in religious, political, and economic

[1] Note especially: Raychaudhuri [465].
[2] Records of Fort St George [35].
[3] Mahalingam [22]; Taylor [23].

values and behaviour as more precipitate than they actually may have been.

The disjunctive view is perhaps most telling with respect to economic changes. That the level of warfare increased from the middle of the sixteenth century seems indisputable, but there is nothing to suggest that this condition was qualitatively different from the preceding several centuries when Telugu warriors expanded their power throughout the macro-region in successive waves of predatory wars. Nor are there convincing reasons to suppose that either the earlier or the later periods of warfare caused a decline in the level of economic activity in the macro-region. Changes there certainly were: the dismantling of the itinerant trade associations, the reduction in scope of agrarian management units, the general level and significance of urbanization, the level of expropriation of surplus wealth, especially from the countryside, and the sometimes very great losses of accumulated treasure of great warrior magnates. In most cases, these changes seemed to have contributed to a more vigorous and diversified economic system than had previously existed.

Several elements contribute to this judgement of the economic history of post-Tālikōṭa south India. These point to the gradual emergence of an increasingly monetized economy based upon commodity production from the early Vijayanagara period until the late seventeenth century. The first of these elements is the greater presence of money in the historical evidence of the period. It has been observed by students of Vijayanagara history that, from the fifteenth century, an ever-larger proportion of land revenue was met by money payments.[1] This included revenue from paddy production in many places where payments had previously been exacted in kind. During the Vijayanagara period and later, as a result of the opening of more interior upland tracts to settled agriculture – much under Telugu migrants – there was an increased proportion of mixed ecotypes producing garden crops, cotton, and dyestuffs, all of which customarily carried a money assessment and were obviously intended for markets, often distant ones. Another vantage point for evaluating the degree of monetization was in temple endowments of the period. From the fifteenth century onward, donors of all kinds supported temples by gifts of money and thus presented temple managers with the task of discovering means for producing a stream of income to defray the costs for ritual services. As observed, this led to the practice of investing in irrigational improvements in temple and other villages.

[1] Appadorai [216], II, 694 ff; Mahalingham [401], *Economic Life in the Vijayanagara Empire*, 164–6.

There is a second indicator of the progressive development of commodity production in a monetized economic framework. This is found in the records of European trading enterprise on the fringes of the macro-region. One student of early European trade has estimated that the Dutch, English, and French companies on the Coromandel Coast each invested an average of about Rs. 1 million in trade annually.[1] The export commodities mobilized by these companies through networks of Indian traders came from an existing commodity system which proved capable of expanding to meet the European demand for textiles and other trade goods with no apparent alteration in forms of productive organization. There were, to be sure, new arrangements made in certain aspects of the financial side of this export trade – such as considerable trade credit available from European traders and the 'joint-stocks' of Indian merchants operating with their own capital under the direction of the European companies. There were also special quarters established for textile producers associated with one or another of the European companies. On the whole, however, the productive organization and capacity as it existed prior to the seventeenth century provided what was sought by European traders. This level of commodity production had slowly come into existence in the centuries prior to the full operation of European chartered companies on the Coromandel Coast.

This evidence can scarcely be reconciled with the supposed economic consequences of the manifest political disorders of the sixteenth to the eighteenth century. It appears clear that the level of violence attending the decline and demise of the Vijayanagara state did not seriously alter or inhibit either commercial or agricultural growth. On the contrary, the emergence of several successor states after the Tālikōṭa defeat in 1565 and especially after the succession wars of 1616 to 1630, though it produced localized, short-term dislocations, probably encouraged the development of agriculture in previously neglected parts of the macro-region. In part this was accomplished through the support of temple-directed rural development, and in part from direct means taken by '*nāyaka* kings'. Commercial development and commodity production appeared to have been similarly stimulated by the enlargement of courtly clients with which the new kings surrounded themselves, and, in the case of some of these clients – such as the Maṟavar Sētupati of Ramanathapuram – they became centres of patronage in their own right. Warfare among Telugu grandees in the Tamil country – which was at once the prize and the arena of much of the conflict – produced some advantages for trading groups like the Telugu Komatis, the scope

[1] Arasaratnam [217], 583.

and variety of whose commercial activities were very great and undoubtedly facilitated by their shared ethnicity with the great personages in the turbulent politics of the time. These traders and some Brahmans emerged as the most active of the great merchants trading with and under the European companies on the Coromandel Coast in the seventeenth century.

CHAPTER VIII

THE SYSTEMS OF AGRICULTURAL PRODUCTION

I Mughal India

Mughal India had the appearance of a vast geographical zone cultivated by myriads of peasants, each with his own separate field. In essentials the agricultural practices of the Indian peasants seemed similar to those pursued by their counterparts in Europe, given the difference in crops and climate. As an English visitor noted, they tilled the land and dressed the corn 'with no remarkable difference from other nations'.[1] The wooden ploughs they used were similar to the 'foot ploughs' used at the time in England;[2] and if there was in the ploughshare only one little iron tooth, or none at all, it was because the 'light grounds' in India did not need the heavy iron coulter.[3] The Indian peasant, moreover, made use of the seed-drill, a late-comer in European agriculture,[4] and, in the case of some crops like cotton, employed even dibbling.[5]

On the peasants' knowledge and use of fertilizer, we have unluckily very little information. On the coasts, fish was used as manure.[6] The usefulness of certain crops in preparing land for cultivation was known at least to theorists.[7] The traditional lore about rotation of crops[8] also gave the peasant an important means to preserve the productivity of the soil.

Another feature of Indian agriculture was the use of artificial irrigation to supplement rain and flood. Wells and tanks were the main sources of such irrigation. Different devices were used for lifting water from wells into field-channels. The simplest device was the wooden scoop or *ḍhenklī*, working on the lever principle, usable where water was close to the surface.[9] The second common method was that of

[1] Fryer [107], II, 108.
[2] Terry [85], 298.
[3] Fryer [107], II, 108.
[4] Cf. Elliot [291], II, 341–2.
[5] 'In some places, they push down a pointed peg (*mekh*) into the ground, put the (cotton) seed into the hole, and cover it with earth – it grows better thus.' Ḥusainī [114], f. 30b.
[6] Thevenot [103], (ed. Sen), 36–7.
[7] Ḥusainī [114], ff. 2a–b, 30a, 31a, speaks of the fertilizing qualities of the *faba sativa* and the Egyptian bean and holds madder to improve nitrous soils.
[8] Elliot [291], 341–2.
[9] Fryer [107], II, 94.

charas, in which water was lifted in a leather bucket attached to a rope drawn over a pulley wheel by a yoke of oxen.[1] The most sophisticated device was the Persian wheel, or '*sāqiya*' of the historians of technology. It was made of wood, rope and earthen pots, and worked on a combination of pin-drum gearing and belt, the gearwheel being rotated by draught animals going round in circles.[2] The cost of the machine, however, probably put it beyond the means of the poorer cultivators. Official statistics of *c.* 1660 from *pargana* Merta (Rajasthan) show that only 1.7 per cent of the wells in that locality had Persian wheels installed over them.[3]

In the northern plains, the wells themselves were usually of the non-masonry type, dug for the seasons, and then abandoned.[4] In *pargana* Merta, about 1660, there were only twenty brick-lined wells out of a total exceeding 6,000.[5] On the other hand, it is possible that the number of wells relative to the cultivated area was probably substantially larger in the seventeenth century than now, the water-table being then much closer to the surface.[6]

Tanks or reservoirs played an important role as sources of irrigation in central India, the Deccan and southern India. Archaeological remains attest to the massiveness of dams and the ingenious arrangement of sluices for letting out water. The description of the remains of the Madag Lake, created by the Vijayanagara emperors during the fifteenth or sixteenth century, furnishes us with a valuable glimpse of traditional Indian civil engineering at its best:

The maker of the lake intended to close the gap in the hills through which the Kumudvati feeder of the Tungbhadra flows into Kod...This was accomplished by throwing up an earthen embankment, now about 800 feet thick at the base and 100 feet high, faced towards the lake with huge stone blocks descending in regular steps from the crest of the embankment to the water's edge. Two similar embankments were also thrown across other gaps in the hills to the right and left of the Kumudvati valley to prevent the pent-up waters escaping from them, and a channel was cut along the hills for the overflow of the lake when it had risen to the intended height. When full this lake must have been ten to fifteen miles long and must have supplied water for the irrigation of a very large area...Each of the three embankments was provided with sluices built of huge slabs of hewn stones for the irrigation of the plain below, and two of these remain as perfect as when they were built. These sluices were built on the same principle as other old Hindu local sluices, a rectangular masonry channel through the dam closed with a perforated stone

[1] Bābur [168], II, 487 ('a laborious and filthy way').
[2] Detailed descriptions in Bābur [168], I, 388; II, 486; Bhandārī [162], 11.
[3] See: Bhadani [230], 8–9.
[4] Pelsaert [92], 48.
[5] Bhadani [230], 8–9. All the brick-lined wells belonged to the category of *kohar* or deep wells, which numbered fifty-five.
[6] Cf. Habib [343], 27–8.

fitted with a wooden stopper. But, as the sluices had to be in proportion to the size of the lake, instead of the small stone pillars which in ordinary works carried the platform over the stopper, the supports were formed of single stones weighing about twenty tons each.[1]

The Madag Lake was not an exception; nor was such grandiose construction of irrigation lakes confined to southern India alone. In Mewār, the Dhebar lake, thirty-six miles in circumference, is mentioned in the *Ā'īn-i Akbarī*, which says it supported wheat cultivation in the country around. The dam which held its vast waters was rebuilt or reinforced in 1687–91.[2] Udaisāgar, twelve miles in circumference, was created by a dam built in 1559–65.[3] Another large lake, the Rājsāgar, was similarly constructed in Mewar in the seventeenth century.[4] The works were all carried out by the rulers of Mewār.

But these larger lakes were probably magnifications of ordinary reservoirs in the hilly zone of the Indian peninsula built collectively by the peasants themselves. We find the Mughal administration in 1650s proposing to advance Rs. 40 to 50,000 to cultivators in Khandesh and a portion of Berar, for the purpose of erecting *bands* or dams for providing irrigation.[5] It is not possible to estimate how much area was irrigated by the lakes and tanks, large and small; but it may be assumed that it was not inconsiderable.

In the northern plains, particularly the Upper Gangetic and Indus basins, numerous canals were cut from rivers to furnish irrigation. Some were impressive works by any standards. Shāhjahān's Nahr-i Faiz was over 150 miles in length, taking off from Yamuna river at the point it leaves the hills, then running, first south-west, and then south-east, to join the parent river at Delhi. Another canal, less than 100 miles long, similarly took off from Ravi river, to rejoin it at Lahore. Traces of other canals are found all over the Indus plains down to the delta; and some of them are mentioned in our sources.[6] The Mughal canals, however, were deficient in several respects: they did not often run above the surrounding plain, and so the water that could be obtained from them for irrigation was limited to what could be lifted out of them. The change that has taken place in the relative importance of canals can be judged from the fact that the *Ā'īn-i Akbarī* describes agriculture in the *ṣūba* of Lahore to be dependent upon wells, and omits any reference to canals, whereas already in 1909–10, over a third of the net

[1] *Gazetteer of the Bombay Presidency* [313], XXII, 261.
[2] Abū'l Fazl [123], 509; Tod [531], 313; Habib was in error in *Agrarian System of Mughal India* [343], 28 and note, in identifying the *A'īn's* lake with Udaisāgar.
[3] Tod [531], 619; Kavirāj Shyāmaldās, *Vīr Vinod*, II, 73.
[4] *Vīr Vinod*, I, 112; II, 448–51.
[5] *Ādāb-i 'Alamgīrī* [14a], f. 53a.
[6] For detailed description, see: Habib [343], 31–5.

cultivated area of western Panjab was irrigated by modern government canals.[1]

An important feature of Indian agriculture was the large number of food and non-food crops raised by the Indian peasant. This set him apart from the peasants of a large portion of the globe, whose knowledge remained confined to a very few crops. The *Ā'īn-i Akbarī* gives revenue-rates for sixteen crops of the *rabī'* (spring) harvest cultivated in all the revenue circles of the Agra province with three others not cultivated in some; and twenty-five crops of the *kharīf* (autumn) cultivated in all, or all but one, circles, with two others not cultivated in two or more circles. Thus in each locality as many as forty-one crops were being cultivated within the year. A similar multiplicity of assessed crops appears in the *Āīn-i Akbarī's* rates for other provinces, e.g. seventeen *rabī'* crops and twenty-six *kharīf* in *ṣūba* Delhi, and so on.[2] Many of these crops were grown only in small areas; and the number of crops raised by an average peasant must have been much less. Still from a *khasra* (revenue record) of a village in eastern Rajasthan, from the year 1796, we find that during the *kharīf* season, nine out of thirty-eight cultivators grew more than five crops on their lands, while eleven of them cultivated two to four crops.[3] And this leaves out the crops of the *rabī'* harvest.

Not only did the Indian peasant grow a multiplicity of crops, but he was also prepared to accept new crops. The seventeenth century saw the introduction and expansion of two major crops, tobacco and maize. Both were immigrants from the New World. The rapid extension of tobacco was spectacular: its cultivation had begun on the western coast soon after 1600; but by 1650, it was being cultivated in almost all parts of the Mughal empire.[4] It was long believed that maize was introduced in India mainly during the nineteenth century.[5] But Gode has established the existence of maize cultivation in seventeenth-century Maharashtra;[6] and under its usual name *makka* it has been found listed among the crops assessed for revenue as early as 1664 in eastern Rajasthan.[7] Similarly, there is good reason to believe that sericulture, unknown in Bengal before the fifteenth century, underwent enormous expansion during the seventeenth century, making Bengal one of the great silk-producing regions of the world.[8]

[1] Abū'l Faẓl [123], I, 538; Habib [351], 17, 27.

[2] These revenues rates are set out for the various provinces in: Abū'l Faẓl [123], I, 348–85. I have collated the text with B. L. MS. Add. 7652 and 6552.

[3] Gupta [337], 171–6.

[4] Habib [343], 45–6, 433.

[5] Watt [539], VI, Part IV, 334–5; Habib [343], 38 and note.

[6] Gode [317], I, 446–7, 450.

[7] Hasan *et al.* [363], 247–51, 254–7, 263.

[8] Habib [353], 186.

There have been only a few additions to the total number of crops since Mughal times: jute was probably grown, but it was not an important crop, sann-hemp providing the fibre for the use to which jute-fibre has been put in modern times. Capsicum or chilli was acclimatized during the eighteenth century,[1] so that the poor did not earlier possess this cheap means of spicing their simple fare. The long and round pepper, being expensive, could only have been used by the rich. Coffee had probably just begun to be grown in southern Maharashtra; tea was unknown.[2] The sweet and ordinary potato were also later introductions.[3]

Horticulture, too, witnessed some important developments during the Mughal period. The techniques of grafting aroused aristocratic interest; and its application led to an improvement in the quality of citrus fruits and to the introduction of sweet cherry in Kashmir. The Portuguese succeeded in producing the well-known grafted variety of mango, the Alphonso; but the practice of mango-grafting seems to have reached northern India only in the eighteenth century. Three new fruits were received from the New World, namely, the pineapple, papaya and cashew nut. The guava came later.[4]

An interesting feature of agriculture during Mughal times, was the mobility of the peasantry. In Babur's words,

> In Hindustān hamlets and villages – even towns – are depopulated and set up in a moment! If a people of a large town, who have lived there for years, flee from it, they do it in such a way that not a sign or trace of them remains in a day or a day and a half. On the other hand, if they fix their eyes on a place in which to settle, they need not dig watercourses or construct dams, because all their crops are rain-grown.... A group collects together, they make a tank or dig a well; they need not build houses or set up walls – *khas* grass abounds, trees (are) innumerable, and straight way there is a village or town.[5]

This was, of course, possible because of the large areas of virgin land available in most regions during the sixteenth and seventeenth centuries. It is likely that desertion of old lands and settlements of new were usually undertaken by peasants organized in communities.[6] In some cases, perhaps, individual peasants, too, shifted their cultivation. We encounter a category of peasants designated *pāikāsht* or *pāhikāsht*, who cultivated lands in villages other than their own. But, if one were to rely on the evidence so far presented, they do not seem to have been

[1] Habib [343], 46–7.
[2] Habib [343], 46.
[3] Habib [343], 48.
[4] Habib [343], 49–51; Habib [349], 6–8.
[5] Bābur [168], II, 487–8, modified in accordance with 'Abdu-r Raḥīm's Persian version, B. L. MS. Or. 3714, f. 377b.
[6] Habib [343], 124.

Table 4. *Average yield*

	(*man-i Akbarī* per *bīgha-i Ilāhī*)		
	(a) 1540–5	(b) Agra: 1870	(c) Delhi: 1870
Wheat	12.96	13.13	12.6
Barley	12.93	12.34	10.9
Gram	10.93	7.12	9.9
Jowar	10.35	7.67	7.5
Bajra	7.62	4.23	7.2
Moth	5.16	3.56	–
Mash	7.77	3.34	–

very numerous and, in many villages, did not even exist.[1] It is also not always clear whether a *pāikāsht* peasant took up land in another village because there was none left in his own, or whether he was an 'entrepreneur' looking for the best lands within reach, to whatever village they belonged, and shifting from one to another, as circumstances presented themselves.

The information on the yield of the crops grown is very limited. The only direct estimates of yield are contained in Abū'l Faẓl's detailed list of crops with their yields stated for good, bad, and middling lands as worked out by Sher Shāh's administration (1540–5). If one follows Abū'l Faẓl in deriving a simple average from the figures for the three categories of land, one would have the average yield that might approximate to the actual average yield of the area around Agra and Delhi. Table 4 gives a comparison of average yield of 1540–5, with the average yields estimated for Agra and Delhi in 1870.[2]

These figures give us the important result that between 1540–5 and 1870 there was practically no change in the yield per unit of area in the case of foodgrains. But for crops other than foodgrains, we have to go to other evidence.

A comparison of the *dastūrs* (cash revenue rates) of *c.* 1595, given in the *A'īn-i Akbarī*, with the estimated value of output of sugar cane for three localities in western Uttar Pradesh (years 1875 and 1882) shows that, relative to wheat, the value of the output of sugar cane remained about the same in two of these localities, and fell by more than a quarter

[1] Chandra has studied their position in detail [262], I, I, 51–64. For the numerical strength of the non-resident cultivators see Chandra [262], 58–9. The table on page 62 (prepared by Dilbagh Singh) presents information relating to an exceptional village, where their number was highest (19 per cent of the total).

[2] Moosvi [417], IV, 93.

in the third.[1] However, since the prices of *gur* (unrefined sugar) and other varieties of sugar fell by about a third or more during the intervening period, it would seem that the average yield of sugar cane in 1595 could not have been more than in the 1870s and 1880s and was possibly less.

Similar comparison shows, on the other hand, that the value of output of cotton and indigo in all likelihood declined during this period. In the same three localities of western Uttar Pradesh, the value of cotton output (relative to that of wheat) in 1875 and 1882 ranged from 43 to 65 per cent of what it was in 1595. The value of output of indigo ranged from only 15 to 24 per cent.[2] In the absence of any record of cotton prices for 1595, it is hard to trace the cause of the decline in value of the output of cotton. It cannot be easily ascribed to a decline in average yield. This is not the case with indigo. The *Ā'īn-i Akbarī*'s *dastūr* and price for Bayāna indigo suggests an average yield somewhere between 45 and 69 lb. avoirdupois per acre about 1595. Pelsaert's statements (*c.* 1626) also suggest that the yield was between 41 and 75 lb. avoirdupois per acre. During the 1870s estimates of the output of indigo per acre in two western Uttar Pradesh districts gave an average of 36.65 lb. avoirdupois per acre.[3] On the other hand, the price of 'evaporated' indigo relative to wheat did not change much between 1595 and 1882.

Our evidence, drawn admittedly from one or two regions only (western Uttar Pradesh and eastern Rajasthan) thus shows that while the yield per acre of the foodgrains remained the same between *c.* 1595 and *c.* 1870, the yield per acre of sugar cane rose, and the yield of indigo remained about the same; it is not possible to be sure about cotton. These conclusions suggest in turn that there was little change in the average productivity of the land during the three centuries. One may think that about 1595 the productivity should have been greater, since the area under cultivation was much less, so that only the more fertile land was put under the plough. But this factor was counterbalanced during the latter half of the nineteenth century by local specialization as a consequence of the railways (ensuring that a crop would be cultivated only where it grew best) and by the modern canal system, which improved irrigation in large tracts. In the net balance, therefore, no great change seems to have taken place.

It is possible, however, that productivity per head (as distinct from per acre) was higher in 1595 than around 1870 or 1900. Given greater availability of land, with means of cultivation remaining the same, the

[1] Trivedi [535], 3.
[2] Trivedi [535], 3–4, for cotton; Moreland [421], 105; Moreland [420], 381; also Habib [343], 432.
[3] The districts are Agra, Aligarh, Etawah and Saharanpur (S. Moosvi, unpublished dissertation).

average peasant holding of 1595 was more likely to approach the optimum size than that of 1900. This inference is difficult to test by a study of actual statistical data, for records of peasant holdings (e.g. *khasra* documents) are extremely rare. But an indirect test may be attempted, by proceeding from two simple assumptions. We can fairly assume that larger average holdings would require a greater number of cattle (bullocks and buffaloes to pull the plough and help draw out water); and the greater number of cattle per capita must be reflected in a more abundant supply of milk and its products. Now, in the *Ā'īn*'s price list for Agra in 1595 and another quotation of prices from the same city in 1669, *ghī* (clarified butter) is assigned a price 8.75 times its weight in wheat. During the last quarter of the nineteenth century, the price had risen to well above eleven times.[1] It would seem, therefore, that milk and its products were distinctly more abundant in the Mughal period than at the end of the nineteenth century. This would mean that the peasant of Mughal India had probably a larger stock of cattle, and thus the ability to plough up a larger area of land than his successor around 1900. It is significant that Abū'l Fażl puts the number of cattle allowed tax-free for each plough at four bullocks, two cows and one buffalo, whereas the average number of cattle per yoke in Uttar Pradesh in 1924–5 was two bullocks, 1.1 cows and one buffalo, and in the Panjab, two bullocks, 1.3 cows and 1.4 buffaloes.[2]

In thus speaking of average yields per cultivator, we ought not to overlook the fact that the Indian peasantry was economically highly stratified, and that considerable differences existed in the size of holdings, produce obtained and resources of the peasants within the same villages. On the one hand, there were the big peasants, or headmen (*muquddams*), who 'organise *khwud kāsht* (cultivation under their own management)'. 'They employ labourers as their servants and put them to the tasks of agriculture; and making them plough, sow, reap and draw water out of the well, they pay them their fixed wages, whether in cash or grain, while appropriating to themselves the gross produce of cultivation'.[3] At the opposite end, were the small peasants (*reza ri'āyā*), who, as a *farmān* issued by Aurangzeb described them, engaged in cultivation but depended 'wholly upon borrowing for their subsistence and for seed and cattle'.[4]

1 Habib [343], 54. The prices paid at Agra by the army in 1875–6, showed the following values for different varieties of *ghī* in terms of wheat: cow's *ghī* (first class), 13.1 times; cow's *ghī* (second class), 12.4; buffalo *ghī* (first class), 12.3; and buffalo *ghī* (second class), 11.6. (*Prices and Wages in India*, 12th issue, Calcutta, 1895, 251).

2 Habib [343], 53 and note.

3 Chhatar Mal [127], f. 8a. *Dīwān Pasand* was written during the first decade of the nineteenth century and describes the agricultural conditions and revenue practices prevalent on the eve of the British conquest of the Doab.

4 *Nigārnāma-i Munshī*, published Nawal Kishore, Lucknow, 1882, p. 139.

For an illustration of such large differences, one may refer to a rather late document, the *khasra* paper for a village in eastern Rajasthan for the *kharīf* harvest of 1796. Here the area under certain (*ẕabṭī*) crops cultivated by each peasant is given, together with amount of the total produce of other (*jinsī*) crops. The number of the peasants (*āsāmī*) was thirty-eight. Out of these, one peasant, designated *patel*, had 16 *bighas* under cotton and gram, while from the remaining portion of his holdings, he obtained 96 maunds, 10 seers, of foodgrains (*bājrā*, *juwār*, *moṭh*) and 6 maunds, 24 seers, of *til*. Another *patel* similarly cultivated three crops (cotton, *mandwā* and *cholā*) on 7 *bighas*, 6 *biswas*, while he produced 127 maunds, 6 seers, of foodgrains (*bājrā*, *moṭh*, *mūng*) and 5 maunds, 28 seers of *til*. This may be contrasted with the position of the ten small peasants each of whom grew a single food-crop, either *bājrā* or *moṭh*, and had an average produce of 8 maunds, 7 seers only. Their total production was less than that of either of the two *patels*.[1]

The difference in the size of the holdings and resources of the peasants had its implications for the cultivation of different crops. The market or cash crops, such as cotton, sugar cane, indigo, betel leaf and opium (and, to a lesser extent, wheat) involved frequent ploughing and watering and thus demanded larger investment in cattle and wells, besides such installations, specific to different crops, as sugar cane presses, boilers, indigo-vats, etc. This meant that these crops could be cultivated only by the bigger peasants (or small *ẕamīndārs*). The returns on these crops were much higher than on foodgrains. This is reflected in the very high rates of revenue, per *bigha*, assigned to them.

The *A'īn-i Akbarī*, *c.* 1595, gives the following rates for the cash and foodgrain crops in the revenue-circle of Agra.[2] It has been estimated

Table 5.

A *Cash crops* Crop	*Dāms* per *bigha*	B *Foodgrains* Crop	*Dāms* per *bigha*
Betel leaf	223.80	Wheat	62.08
Indigo	156.52	Rice, ordinary	60.36
Sugar cane	147.60	Barley	49.20
Opium	127.44	Jowar	44.72
Cotton	87.20	Bajra	31.32

[1] Information abstracted from table in S. P. Gupta, '*Khasra* documents in Rajasthan', *Medieval India – a Miscellany*, IV (1977), 171–6. 1 maund = 40 seers.

[2] Abū'l Faẓl [123], 356–63.

from surviving revenue records that in a *pargana* of eastern Rajasthan, sugar cane and cotton occupied 8 per cent of the total area sown for the *kharīf* harvest in 1690. But the share of the two crops in the total value of the yield of the harvest was 32.6 per cent.[1] Such peasants as were able to command the necessary resources to raise these crops must then have normally gained substantially from their investment.

In regional distribution, too, the foodgrains and cash crops show quite different tendencies, when we compare the conditions of the seventeenth century with those of the late nineteenth. The regional distribution of the food crops seems hardly to have altered: climate and the volume of seasonal flood set the limits, as they do now, to the rice and wheat zone. Only, there was some cultivation of wheat in Bengal. Millets and pulses followed the same pattern of distribution as today.[2]

The pattern of distribution of cash-crops, on the other hand, has greatly altered, largely as a result of railway construction and the demands of modern industry. In Mughal India there was a compulsion to grow crops like cotton or indigo almost everywhere, because the existing means of transport inhibited local specialization (which railways have now made possible). Owing to the market for industrial oils, cultivation of oil-seeds greatly increased in the nineteenth century; and, simultaneously, the expansion of jute in Bengal under the impetus of the demand for a cheap packing material was phenomenal. Only the dye-yielding crops present an exception, indigo and the red-dye plant, *āl*, having been destroyed by competition from chemical dyes.

If one moves from the consideration of the geographical distribution of crops to the total volume of the production of each crop, one is faced with an almost total absence of data. Indigo and silk offer the only products for which some quantitative information of the sort needed is available.

For reasons already stated, the area sown with indigo in the seventeenth century was probably far less than during the nineteenth century, but it is yet probable that the total annual production of the dye was quite considerable. Seventeenth-century estimates of its production in three principal tracts of northern India suggest that in favourable years the total production in these tracts amounted to 1.8 million lb.[3] Considering the other large areas where indigo was produced, we may put the total annual production for the whole of India at about 4 to 5 million lb. This compares with the annual production of 26.6 million lb. in 1898–9, a very good year, but only 6.3 million lb. in 1904–5, when the decline in the fortunes of the crop had begun.[4]

It is possible similarly to hazard an estimate of the total production

[1] Hasan *et al.* [363], 249, 260, (tables I and V).
[2] Habib [343], 36–8.
[3] Habib [343], 43–4 and note.
[4] Watt [541], 672.

of mulberry silk. The estimate given by Tavernier (1640–66) suggests that the annual supply of silk at Qasimbazar, the principal market in Bengal, amounted to either 2.4 or 3.1 million lb. avoirdupois.[1] This probably stands for the total silk production of Bengal, and is quite possibly an overestimate at that. But if one remembers that during the seventeenth century Kashmir also produced silk, we may suppose the annual Indian silk production to have reached 3 to 4 million lb. avoirdupois.[2] This was much more than what was produced in recent years. In 1963, the total silk production was estimated at 2.7 million lb.[3]

If we can deduce anything from the estimates for indigo and silk, we may assume that India produced during the seventeenth century enormous quantities not only of foodgrains, but also of a number of market or 'industrial' crops. The extensive long-distance overland and oversea commerce in cotton, opium, as well as indigo and silk[4] is certainly to be explained by the large volume of production of these commodities.

If the absolute size of the agricultural product, or even the per capita product, in Mughal India was impressive, it does not necessarily follow that agricultural production was carried on at a smooth or even pace. On the contrary, there were two factors, one natural and the other human, which created serious interruptions or violent setbacks for agricultural life.

The first factor was climatic, essentially, the untimeliness, scarcity or superfluity of rain. The dependence of Indian agriculture on the monsoons is proverbial. In the absence of adequate means for transporting grain in bulk, the mortality in each major famine, which was often accompanied by pestilence, was frightful. During the 1630–2 famine in Gujarat, 3 million people are said to have died.[5] In the years 1702–3 and 1703–4, 2 million people are said to have died of starvation in the Deccan.[6] These figures in themselves are guesses only, but are still important as showing the immensity of the mortality as it appeared to contemporaries. The Gujarat famine of 1630–2, caused a lasting dislocation to the economy of the region. The villages were utterly depopulated; and when they began to 'fill but slowly' late in 1634, the peasants who had survived abandoned cotton cultivation for food

[1] Tavernier [104] (2), II, 2.
[2] Cf. Habib [353], 188.
[3] Commonwealth Economic Committee [275], 127–8. In addition to mulberry silk, there were different varieties of wild or semi-domesticated silks, especially eri and tasar. There is no indication of the quantities of such silks produced in the seventeenth century; in 1963 their total production was estimated at about 1 million lb.
[4] For which see: Habib [343], 71–5.
[5] Report of the Portuguese Viceroy, quoted by Foster [31], xxi.
[6] Manucci [110], IV, 97.

crops.[1] The marks of the famine were visible in 1638–9;[2] and even by 1647 agriculture in Gujarat had not fully recovered, since the revenues of the province had not yet reached the level attained before the famine.[3]

The second factor to consider is the impact of the system of agrarian exploitation. It has been argued that since the land revenue covered practically the entire surplus produce raised by the peasant, and that since, representing a fixed share of the produce or a fixed cash-rate on the crop per unit of area, it was a retrogressive tax, it fell excessively heavily on the smaller peasantry.[4] In addition, the system of *jāgīr* transfers encouraged an unchecked spoliation of the peasantry by the potentates.[5] The result was a phenomenon implied in Mughal official documents,[6] and described by contemporary observers like Bernier,[7] namely, the large-scale abandonment of land by peasants.

With famines as recurring setbacks to agricultural production and Mughal agrarian exploitation as a factor of constant pressure upon the peasantry, it would perhaps be reasonable to rule out any spectacular increase in the extent of cultivation during the Mughal period. There were areas, it is true, that were reclaimed from waste or forest as in the Terai or eastern Bengal; but such reclamation did not exclude the simultaneous process of depopulation in other areas. Unluckily, the statistical evidence we have is not of the sort that would enable us to say anything with assurance. The measured area under Aurangzeb, for example, shows great advance over that of the *Ā'īn-i Akbarī* in some provinces; but this is obviously due not to a corresponding increase in cultivation, but to an extension of measurement. There is, however, one indication: the *jama'-dāmī* (assessed revenue) statistics show an increase in money terms between 1595 and 1707; but when adjusted to the general upward movement of prices, the increase either disappears or turns out to be marginal. This lends some substance to the view that the overall increase in cultivation in the Mughal period could not have been very considerable.[8] Such a conclusion would also accord with the low average annual rate of population growth (0.14 per cent) that the best estimates of Indian population suggest for the period 1600–1800.[9]

[1] Foster [31], 64–5.
[2] S. Commissariat [274], 7.
[3] Lāhorī [157], II, 711–12.
[4] Habib [343], 190–6; Habib [351], (*Enquiry*), 13–14.
[5] Habib [343], 319–26.
[6] Aurangzeb's *farmāns* to Rasikdās and Muḥammad Hāshim are both concerned in varying degrees with the decline in cultivation and the flight of peasants from land. See texts published by J. N. Sarkar in *JASB*, N.S., II (1906), 223–49.
[7] Bernier [102], 205, 226–7.
[8] Habib [343], 326–8.
[9] See chapter VI.

2 South India

The available contemporary sources are extremely insufficient for a full understanding of the level of development and the special characteristics of agricultural production in the period. It is necessary to use later data of the colonial period, taking into consideration, of course, the fact that the beginning of the nineteenth century was a time of economic decline caused by the political events of the second half of the eighteenth century.

South Indian agricultural production was developing first of all on the basis of utilizing the natural features of the land and by way of adaptation to them. The most important of these were: (1) the tropical climate, allowing in principle, provided there was enough moisture, some kind of agriculture all through the year; (2) more even distribution of rains than in northern India (combination of south-western and south-eastern monsoons), which to an extent made it really possible to vary dates of sowing and harvesting of some crops; (3) large quantity of unoccupied lands, absence of land-starvation, and, on the contrary, a shortage of labour; (4) the great expenditure of labour for bringing into cultivation the new lands.

For instance, the cultivation of virgin black soil in the Deccan demanded first of all the clearing of forests and bushes. Then the parcel of land was ploughed several times in mutually perpendicular directions. The unusually heavy plough drawn by four or five pairs of bullocks was used. Then the roots and rhizomes were taken out of the soil by hand. Then the parcel was harrowed several times with heavy, average, and light harrows. After one more weeding of the roots and weeds the field was levelled with a light harrow and the sowing took place.[1]

The cultivation of virgin red soils was almost equally labour-intensive. Besides clearing, ploughing and harrowing red soil requires fertilizers. Even virgin red soil was manured with cow-dung, ashes, or village refuse. All this was scattered over the field and ploughed in.[2]

Dry cultivation was most widespread in southern India and, compared to the northern parts, more reliable there. At least the crop in the rainy season was usually good. Nevertheless, each village had to have a part of land artificially irrigated to reduce the risk of crop failure and starvation.

Wet cultivation was even more labour-consuming. First of all much labour was needed for the construction and proper exploitation of the irrigation system. The south Indian rivers are rain-fed. Their water level fluctuates considerably during the year. Therefore the canal system of irrigation did not develop much in south India. Storing rain and

[1] Hamilton [356], II, 324–5.

[2] Hamilton [356], II, 325–6.

high-flood water in special reservoirs or with the help of dams became the main method of irrigation. Sometimes for the same purpose the rivers were blocked with several successive dams. Dry fields were called *puñcai*, wet fields were known as *nañcai*.

Sometimes there were wells which gave a limited but reasonably guaranteed quantity of water. Lands with well irrigation were used mainly for fruit trees and vegetables and were called 'garden lands' (*tottakal*).

The construction of an irrigation system usually was beyond the labour resources of a single household and hence undertaken by a village or a group of villages. In the seventeenth and eighteenth centuries the representatives of central power and the local officials are more often seen as the organizers of the construction of reservoirs, canals, sluices etc. than before.[1]

Irrigation was considered a work of religious merit, with the result that during all the known history of southern India we find inscriptions, detailing the construction of tanks, dams, etc. But the total result of these works looks rather modest. In most parts of southern India in the beginning of the nineteenth century only 3 to 7 per cent of cultivated territory was irrigated. Only in Tanjore, where the conditions for irrigation were especially good, was this ratio nearer to 50 per cent.[2]

Irrigation management in the medieval period was often uneconomical. Tanks and canals were neglected and abandoned, perhaps as often as they were constructed.

The use of stored water was connected with other rather difficult jobs, i.e. the levelling and terracing of fields, and demarcation of boundaries with small bunds, which were necessary to keep water on the field during the ripening of crops.[3]

The main crop on the wet lands was paddy, the most important foodgrain of southern India. The most intensive and productive method of paddy cultivation was based on the transplantation of seedlings. Seeds were sown densely in seed-beds and at the same time the other field where seeds would be transplanted was prepared. During eight weeks this field was ploughed four times and the last time manure was ploughed in. After that the seedlings were planted in clusters of three to five plants. The field, ideally had to be under water up to the time of harvesting. Three weedings were necessary. Paddy became ready for harvesting after three to four months.[4]

[1] *Annual Report on Epigraphy*, 261, 262, 264 of 1906; 394 of 1907; 305, 308 of 1926; Mahalingam, *Economic Life in the Vijayanagar Empire* [401], 48–59; Ramanayya [458], 189–190; Raju [457], 119–120.

[2] *Select Committee on the Affairs of the East India Company* [298], 979.

[3] Buchanan [242], 1, 84.

[4] Buchanan [242], 84–9.

Enormous expenditure of labour in cultivation of virgin soils, in making the field wet, etc. created the necessity to economize labour in other operations. As a result a very peculiar agricultural cycle was used in the dry cultivation. The field, provided that it was properly cultivated in the first year, was not ploughed for several years. Each following season before sowing it was only superficially loosened with a bullock-hoe, and weeds were removed as far as possible. The fields were ploughed usually once in five or six years, but some fields with black soil required ploughing only once in twenty years.[1]

This agricultural cycle strikingly shows the essential feature of agricultural production, which was its extensive, labour-saving character. At the end of the cycle the land, without interruption for fallow, had the qualities of potentially rich virgin soil, but at the same time the negative properties of the same, i.e. tightness and a turf-like top layer. Such a parcel needed large expenditure of labour once more to start the next cycle. South Indian family holdings usually included parcels, the first cultivation of which took place in different years; therefore, the householders could distribute their labour, using much of it in one field and almost none in others.

The principle of labour-saving was in force on the wet lands as well. To bring a field into an irrigated condition needed so much labour that further intensification became impossible. F. Buchanan did not appreciate this factor and wrote, obviously with some irritation: 'So far as I have observed in Mysore, ground, once brought into cultivation for rice, is universally considered as arrived at the highest possible degree of improvement; and all attempts to render it more productive by a succession of crops, or by fallow, would be looked upon as proofs of insanity'.[2]

For the same reason of deficiency of labour the Indian agriculturist could but use only the most profitable method of rice transplantation. Simultaneously, he used other less labour-consuming methods, which involved longer gestation periods, e.g. the broadcast sowing with dry seeds and sowing with sprouted seeds.[3]

There were two main seasons of rice cultivation *kuddapah-kar* and *samba-peshanam*. They were named after the varities of paddy, cultivated during the summer and winter months. For the summer crop a part of the best land was allotted, and the productivity was high. Winter crops were grown on a much more extensive sown area and though the productivity was less by a half or one-third, the gross output was much more abundant.

But there were no two distinct agricultural seasons in southern India

[1] Hamilton [356], 324–5; Marshall [409], 114.
[2] Buchanan [242], 93.
[3] Buchanan [242], 84–9.

(like *kharīf* and *rabī'* in northern India) for other crops. For instance, in North Arcot dry crops (kumbu, red gram, horse gram, castor) were sown from May to September/October and harvested from August to December/January.[1] On the wet lands in August/September the *rāgi* and *cholam*, and in February/March the paddy crop, were harvested. On other lands one paddy crop was standing in the field from June/July up to December/January and another from January/February up to April/May.[2] A third category of land was at the same time under crops which needed the whole year (sugar cane, indigo, saffron) or even three years (plantains, betel vines) for their cultivation. Besides, there were fields sown with two crops simultaneously, i.e. with pulses and grains, which were collected at different times. D. Barbosa in the early sixteenth century wrote of Malabar, perhaps with some exaggeration: 'everything is produced in every month of the year'.[3]

The urge towards the distribution of work over the year as evenly as possible was also a method of labour-saving. In the time of harvesting or sowing of one crop the agriculturists usually had no possibility of paying attention to another one.

In spite of the attempt to thus distribute the labour, for paddy, sugar cane etc. the sowing and harvesting seasons tended to be the toiling periods. Each householder, even the marginal peasant, had to use additional labour in these seasons. This additional labour was sometimes provided in the form of peasant cooperation but also in the form of labourers from depressed untouchable castes. Without going into the problem of the origin of untouchability in India or in southern India in particular and into the socio-religious aspects of this phenomenon, we should note that the considerable group of landless labourers, forced by their social and economic dependence to work in the others' households, was an essential element in the production system.

D. Kumar has estimated that at the beginning of the nineteenth century in the Madras Presidency agrestic labourers, mainly from the untouchable castes, numbered up to 10–15 per cent of the population and 17–25 per cent of the agricultural population.[4] They were comparatively less numerous in Rayalasima, Baramahal and Mysore, but in eastern Tamilnadu and in Kerala the untouchables' labour had more importance than the average figures indicate.

The small-peasant household based on personal labour of the householder was but one type of production unit in agriculture. Widespread to some extent were also two other types, i.e. the large-peasant household with the householder taking some part in the work but mainly dependent on the regular inflow of additional labour; and

[1] Ratnam [462], 16.
[2] Ratnam [462], 13.
[3] Barbosa [80], II, 90.
[4] Kumar [388], 191.

the type in which the householder directed the work of labourers dependent on him and attached to the land.

The Indian social system reversed the influence of economic factors. The deficiency of labour force mentioned above was to an extent connected with the fact that an appreciable part of the population from high castes considered physical labour as degrading and some agricultural operations as forbidden and constantly sought to avoid personal participation in the production processes.

Some features of Indian agriculture conventionally looked upon as the indices of its backwardness were connected with the production system as a whole and cannot be assessed separately.

For instance, from the European travellers' point-of-view the agricultural implements were too 'simple' and 'rude'.[1] But they were sufficiently diversified and fitted for the conditions of native agriculture. There was a special implement for every operation and for various kinds of soil. The hard black soil was cultivated with heavy ploughs, each drawn by two to three pairs of bullocks or buffaloes. For less hard unirrigated land the medium-size plough was used. The plough used on the wet land was the smallest. A man could bear two such ploughs, one on each shoulder. Besides these main types there were several others, specially suitable for the different regions.

The ploughs were made of certain kinds of hardwood. For the light sandy soil a wooden ploughshare was sometimes used,[2] but as a rule the ploughshare was of iron.

Besides ploughs, many varieties of harrows with wooden and iron teeth, seed-drills, hoes, sickles for crops and for grass and so on, were used.

Indian ploughs had no mouldboard and therefore, properly speaking, it did not plough the soil but loosened it. But the turning of the layer in many parts of India, including the southern region, was unnecessary and sometimes even harmful, because it might cause damage to the soil with acid and saline substances.

The same should be said about the depth of ploughing. By British standards the Indians ploughed to little depth (3–5 in.). But deeper ploughing in Indian climatic conditions and under the then existing technology would lead to greater evaporation and overdrying of the soil.[3]

The Indian cultivator knows the usefulness of crop-rotation, of fallows, of manuring, but all these methods were not developed into a system, which means that there was no necessity for such a system. The ***nañcai*** lands as a rule did not demand crop rotation and manuring,

[1] Growse [328], I, 341; Buchanan [242], I, 126.

[2] Forbes [301], 394.

[3] Bose [236a], 209–11; Buchanan [242], II, 278.

as the inflow water contained the mineral and organic substances which manured and improved the soil. Dry black soil, as mentioned above, retained its productivity for a long period and during some years of decreasing output they accumulated the organic matters which gave a boost to productivity in the beginning of the next agricultural cycle. Manuring was not essential in this situation. The importance of manuring the red soil was realized. The possibilities of manuring with cow-dung at that time were more favourable than they are now. In all parts except Tanjore there were enough grazing grounds and much cattle.

A method of manuring with the help of flocks of sheep and goats was widespread. It was assumed that a *kani* of land (1.32 acres) might be manured well if a flock of 1,000 head spent five or six nights on it. Afterwards the field produced well for six or seven years.[1] The payment to herdsmen was rather high for those days and this method of manuring was open to the well-to-do householders only or to the influential local people such as headmen and others who might receive such a service from the herdsmen *gratis*.

To assess the efficiency of the Indian system of agriculture it is necessary to remember that high gross produce was secured only from a part of the cultivated land, i.e. on the wet, the garden and the best dry-lands, situated near a village. These parts of the land were cultivated better, manured if possible and never went out of cultivation unless some natural or political calamities intervened. Beside this part there was a vast peripheral area of worse or inconveniently situated lands which were cultivated from time to time but in a rather careless manner. The small out-turn of this second kind of land apparently caused no concern.

The inscriptions of the tenth or fourteenth centuries sometimes allows one to estimate the possible productivity of land of the first kind. An inscription of 969 from Tiruchirapalli shows that a temple received as rent 120 *kalams* of paddy per *veli* of temple lands.[2] The usual rate of tax of 100 *kalams* of paddy per *veli* was mentioned in some early eleventh-century inscriptions.[3] The inscription of 1036 suggests that the average tax from some land was about 112.5 *kalams* per *veli*.[4] The rate of tax in those times was hardly higher than a quarter of the gross produce. If this was so, the average output should have been about 400–450 *kalams* per *veli*.

One of the inscriptions of Rajendra I Chōḷa suggests that the average

[1] Ratnam [462], 48; Coats [271a], 249–50.
[2] *South Indian Inscriptions* [55], XIII, No. 236, 126–7.
[3] *South India Inscriptions* [55], I, 43, 59–68; pt III, No. 66, 261.
[4] *South Indian Inscriptions* [55], IV, No. 223, 29–31.

Table 6. *The average gross produce of paddy in several districts of southern India (end of the eighteenth to the beginning of the nineteenth century)**

		Output of paddy	
District	Year	in *kalams*† per *veli*	in centners per hectare
Madura	1796	84.6	20.4
Tanjore	1774	150.5	12.25
Tanjore (low districts)	1801–2	195	15.9
Tanjore (high districts)	1801–2	114.2	9.3
South Arcot	1819–20	158	12.9
Chingleput	1788	78	29.5
Tiruvelveli	1802–03 to 1807–08 (average for a year)	51	19.3
Coimbatore	1807		
	First crop	196.1	4.2
	Second crop	147	55.7

* Recalculated on the basis of Ratnam [462], 10–11, 26, 42–3, 57, 67, 87.
† 1 *veli* = 6.6 acres = 2.64 hectares. 1 *kalam* was equivalent in most of the districts to 220.8 lb. i.e. 1 centner, and in Tanjore and South Arcot to 47.4 lb. i.e. 21.5 kg.

gross produce from some lands of a village in South Arcot was 583.3 *kalams*, and from other lands, 233 *kalams* of paddy per *veli* plus some other crops, the price of which was 1.37 *kalañju* (gold coins).[1] A grant of 1325 from Ramnad mentions some lands (more productive than the other according to the context), which brought 40 *kalams* of paddy per maund, i.e. 800 *kalams* per *veli*.[2] If, in the two last-mentioned inscriptions the Tanjore *kalam* was implied, then the average produce from the land of various kinds in South Arcot would be 33 centners of paddy per hectare, and in Ramnad from the best lands only it would be 66 centners per hectare (22 and 44 centners of rice respectively).

Of course, there is no certainty that the land and other measures used in the inscriptions exactly corresponded to the measures of the same names, identified by the British at the end of the eighteenth century.

[1] *Annual Report on Epigraphy*, 333 of 1917.
[2] *Ibid.*, 39 of 1924.

But we have no better way to calculate the agricultural output in those times.

Unfortunately we have no data of the same kind from the period under review, but we may compare the earlier figures with those collected in the early British period. This comparison (see table 6) may create some confusion, because even the highest figures of productivity (intentionally selected for the table) for the end of the eighteenth and the beginning of the nineteenth century show an enormous decline, though they are higher than in the present day. Several explanations are possible for such statistical decline. First, the British received considerably underestimated data for productivity as the local officials and the householders were both anxious to conceal part of the produce from the taxation authorities. Second, all the sown area including the land, where the out-turn was trifling, was taken into account. This method of calculation, though good from many other points of view, does not help our effort to estimate the efficiency of the native system of agriculture in optimal conditions, i.e. in the conditions of regular cultivation of comparatively good lands.

Particularly striking are the sharp differences in the data on Coimbatore, which was not the most agriculturally productive of southern India. J. Hodgson took here the land of the 'first quality' only and as a sum of crops of two seasons (343 *kalams* of paddy per *veli*) came to a figure rather near those which might be extracted from the early medieval inscriptions. It seems that approximately the same method of calculating the gross produce and the taxes was used by the medieval officials.

Though the above-mentioned data are open to some doubts, it seems reasonable to derive from them the tentative conclusion that the native system of agriculture was highly productive but that the productivity tended to decline. The main negative feature of this system was that it was able to expand only up to some limit. It could not secure the high level of productivity on all the cultivable land.

The main foodgrain was rice, but the millets (*cholam*, *ragi*, *varagu*, etc.) occupied a comparable area. Rice was at the same time the most important commodity. The poorer strata of the population sold the rice they produced (except the part taken in kind as a tax) in order to buy *ragi* and *cholam* for their own consumption. Other commodities were pepper, produced mainly on the Malabar Coast, chilli, oil-producing crops (sesame, flax, groundnut), cotton. In the inscriptions of the sixteenth and seventeenth centuries and earlier, village bazaars and fairs are mentioned where the retail trade in rice, betel-leaves, pulses, *ragi*, oil, pepper, milk, jaggery and artisans' goods took place.[1] F. Buchanan

[1] Ramanayya [458], 207, 210–12.

wrote that 'in good parts of the country' the inhabited places with weekly markets were at a distance of two or three miles one from another.[1]

Some regional division of labour arose. The Malabar pepper and other spices were in demand all over southern India and in the foreign markets. There was not enough rice in Malabar and the import of rice there from Gujarat, the Coromandel Coast and Bengal continued to be important in this period.[2]

But the connections of the rural population with the market did not yet create a commodity-production system. The agriculture continued to be essentially natural, as the reproduction of its labour implements was going on inside the village community on the basis of natural exchange between the artisans (the blacksmith, the carpenter, etc.) and the cultivator.

The system of agriculture developed and traditionally consolidated in southern India was extensive in principle, oriented to labour-saving and not to land-saving. It assured a definite and rather high level of agricultural productivity, but the further increase on the basis of the same system was impossible. With the growth of population and cultivation of the worse lands this system was sure to suffer a sharp decline in its productivity as happened later on. The system of traditional services by artisans who produced the agricultural implements, as well as widespread use of dependent labourers not interested in the results of their labour, were the greatest obstacles preventing an intensification of the methods of production.

[1] Buchanan [242], I, 125.

[2] Barbosa [80], I, 169–170; 184–6, 194–5, 198; II, 125; Sen [487], 193–4.

CHAPTER IX

AGRARIAN RELATIONS AND LAND REVENUE

1 North India

LAND REVENUE

It is best to begin our survey of agrarian relations in Mughal India, with an examination of the nature and magnitude of 'land revenue' (*māl*, *kharāj*), since it accounted for the larger part of the agricultural surplus of the country. As understood by the succeeding British administrators, it represented 'the property (vested in government by immemorial usage) of ten-elevenths of the net rental of the country'.[1] European travellers who visited the country during the sixteenth and seventeenth centuries, commonly described the king as the 'owner' of all land in India, for he so obviously appropriated what seemed to be the 'rent' of the soil.[2] An Indian lexicographer of the eighteenth century, too, cited a similar view.[3] An eighteenth-century jurist, who explicitly rejected such an assumption, still argued that the tax in India was not the *kharāj* of Islamic law, because it often exceeded half of the produce.[4]

The jurist was so far right that while *māl*, the Mughal tax occupied as important a position in Indian economy as rent in any feudal economy, it was not, properly speaking, rent or even a land tax. It was a tax on the crop. It was thus also different from its successor, the 'land revenue' of British settlements, which was conceived of as a standard burden fixed in cash on a particular area of land, irrespective of what grew on that land.

Māl essentially represented a claim on behalf of the state to a share of the actual crop. This could be seen most clearly in the primitive form of its realization, known as *bhāolī* or *baṭāī* in Hindi, and *ghalla-bakhshī* in Persian. Here a simple sharing of the harvested grain took place, one share being left to the revenue payer, and the other set apart for the state or its assignee. From this simple sharing, we can trace the

[1] Mackenzie [397], 62n. [2] Habib [343], 111–13.

[3] 'Bahār' [183]. This dictionary was completed in 1739–40. Its author cites a senior contemporary, Abū-l Khair 'Wafāī' for the view that *kharāj* (land-revenue) is due to the king on account of his right of property (*milkiyat*) in the land.

[4] Muḥammad A'lā [125], ff. 43b, 44b.

evolution of other more sophisticated systems of assessment, which were designed to reduce the burden of work and expense for the administration. First came *kankūṭ*. Here, instead of actually dividing the grain (*kan*), an estimate (*kūṭ*) was made, by working out the *rai*ʿ or yield per unit of area at the current harvest and multiplying this by the total area under the particular crop, so as to obtain the total produce of the crop. The quantity claimed in tax could then be fixed according to the proportion the tax was supposed to bear to the produce. The *rai*ʿ was traditionally calculated with the aid of sample cuttings at harvest time from three small plots of high, medium and low productivity; and the measurement of the land could be carried out any time between sowing and harvest.[1] It is possible that the system of *kankūṭ* was already in use as early as the fourteenth century.[2]

While *kankūṭ* reduced expense and vexation for the revenue-collecting authorities, it continued to share with *bhāolī* the disadvantage of keeping them in ignorance of the amount that would be actually collected at the harvest. Moreover, the determination of *rai*ʿ upon the spot left too great a discretion in the hands of the local officials, who might abuse this power, at the expense of the state as well as the revenue payers. These considerations were probably at the root of the radical alterations in the *kankūṭ* system brought about by Sher Shāh, the Sūr emperor (1540–5). Instead of leaving the *rai*ʿ to be fixed at each harvest, a standard schedule was now promulgated, to be applied to the sown area irrespective of the actual harvest. The schedule gave the high, medium and low yields for each crop, and then, obtaining the average produce, fixed the tax at a third of the average.[3]

So modified, the *kankūṭ* system became transformed into *ẓabṭ* ('measurement'). The assessor now had little concern with the harvest. He had simply to measure the land sown with each crop, and, with the standard schedule of *rai*ʿ in his hand, he could tell the revenue payers well in advance of the harvest how much in kind they would have to part with. The only allowance he might make for harvest failure was to declare a part of the sown area to be *nābūd*, or 'crop-less', and remit the tax thereon.

It is difficult to establish whether Sher Shāh fixed the *rai*ʿs reproduced by Abū'l Faẓl, for a district, e.g. Delhi or Agra, or for 'Hindūstān' (upper and middle Ganga basin and the Panjab) as a whole. Improbable though it may otherwise seem, the latter appears to have been the case, since the rates in kind, even when converted into cash (in which form they

[1] The classic passage on crop-sharing and *kankūṭ* is in Abū'l Faẓl [123], I, 285–6.

[2] 'Alā'uddin Khaljī (1296–1316) is said to have measured the land and taken half the produce in kind. This combination implies the use of a system identical with, or akin to, *kankūṭ*.

[3] Abū'l Faẓl [123], I, 497–500.

were known as *dastūru'l 'amals*) continued to be largely uniform for all crops in all provinces during the early years of Akbar's reign. But Akbar's administration strove to make the rates realistic, either by varying local *rai's* or commuting the *rai's* at local prices, or by both means, so that the *dastūru'l 'amals* begin to show large local variations from 1565–6 onwards.[1] In 1574–5 Akbar took a series of important measures, which involved, among other things, a new attempt to work out the revenue rates. Information on yields, prices and the area cultivated was collected for each locality for a period of ten years, 1570–1 to 1579–80. On the basis of this detailed information, the revenue rates were now fixed directly in cash for each crop. The provinces of Lahore, Multan, Ajmer, Delhi, Agra, Malwa, Allahabad and Awadh were divided into revenue circles, each with a separate schedule of cash revenue-rates (*dastūru'l 'amals*) for various crops. There was henceforth to be no reference to *rai's* and their commutation into cash at current prices. On the contrary, sanctioned cash rates were to be applied year after year, with such revision only as might be decreed by the administration in these rates from time to time.

This was the *ẓabṭ* system in its final form. It simplified the process of assessment very greatly, though much depended, of course, on the accuracy with which the standard cash rates were fixed for each locality. If one maps the revenue rates of a particular crop in the various revenue circles, one often sees a geographical pattern, which is not only at variance with the administrative divisions but also with the patterns made by the revenue rates of other crops. Such divergence suggests that the cash rates were not fixed by simple 'rules of thumb', but were the results of enquiries into the yields and prices of each crop in the different localities.

The classical *ẓabṭ* system involved annual measurement. This, however, was a worrisome process, for both the administration and the revenue payers. Annual measurement was, therefore, usually done away with by accepting, with some revision, the area statistics obtained in previous measurement. Such acceptance, for purposes of current assessment, of area previously determined was called *nasaq*.[2]

Under Akbar, the *ẓabṭ* system practically covered the entire region from the Indus to the Ghaghra. A major extension of it occurred in the later years of Shāhjahān's reign, when it was established in the Deccan by Murshid Qulī Khān. The essence of his measure lay in, first, establishing crop-sharing, or rather *kankūṭ*, for some time, so as to establish the *rai's* for various crops in different districts, varying the

[1] The *dastūru'l 'amals* for various crops decreed in various provinces, during the early years of Akbar's reign are set out in the chapter headed '19-Year Rates' in: Abū'l Faẓl [123], I, 303–47.

[2] Habib [343], 215–17.

government share according to crop as well as such factors as natural or artificial irrigation. Then he worked out the cash rates or *dastūru'l 'amals*. Over a large part of the Deccan the older system of levying land revenue on the basis of the number of ploughs was now replaced by a full-fledged system of measurement.[1]

It should, however, be understood that even in areas where the *ẕabṯ* was the standard system, other methods of assessment, notably *bhāolī* and *kankūṯ*, continued in use in certain villages or for certain crops. In several localities these remained the major methods of assessment, though with much local variation. Abū'l Fazl says (*c.* 1595) that in *ṣūba* Ajmer (Rājasthan), crop-sharing (*ghalla-bakhshī*) was prevalent;[2] and, sure enough, the *arhsattha* documents attest to the domination of *jinsī* (another term, still, for crop-sharing) over *ẕabṯī* in seventeenth-century eastern Rajasthan.[3] In Kashmir and southern Sind, crop-sharing was in vogue for collecting revenue; and it replaced measurement in Gujarat about the middle of the seventeenth century.[4]

Bengal stood apart from other provinces because the system in force here was the one known elsewhere as *muqṯa'ī*, a fixed demand. The revenue was levied in cash, at rates per unit of land, or in lump sums covering entire villages, the same amounts being levied year after year, until, as a special measure, there might be a revision or enhancement.[5]

Amidst the complexity of arrangements for assessment and collection, one major aim of the Mughal administration still stands out in bold relief: the attempt at securing the bulk of the peasant's surplus. The shares of the crop taken under the *bhāolī* or *kankūṯ* varied with crops and localities, but one-half in the less fertile regions, and substantially more in the more fertile seem to have represented the norm.[6] Under the *ẕabṯ*, the revenue rate in kind fixed by Sher Shāh was supposedly a third of the *rai'* (harvest yield); but it has been shown that the *dastūru'l 'amals* actually in force represented the value of about half of the produce of the important foodgrain crops.[7]

In addition to the *māl* proper, assessed at such high rates, there were a number of other rural taxes, collectively called *jihāt* and *sā'ir-jihāt*, *furū'āt* and *abwāb*. The levies, imposts and officials' fees comprehended under these heads varied from locality to locality; but it would seem that the total amount collected under the miscellaneous items might amount to as much as 25 per cent of the land revenue.[8] The *jiẕiya*, or poll tax on non-Muslims, imposed by Aurangzeb in 1679, represented

[1] Habib [343], 227–8.
[2] Abū'l Fazl [123], I, 505.
[3] Hasan *et al.* [363], 259–62.
[4] Habib [343], 223–6.
[5] Habib [343], 228–30.
[6] Habib [343], 191–4. The share of various crops taken as revenue in eastern Rajasthan ranged from 33 per cent to 50 per cent, (Hasan *et al.* [363], 246).
[7] Moosvi [416], IV.
[8] Siddiqi [501], 44; Gupta [336], 283–9.

a new additional burden. It was computed at 4 per cent of the total assessed revenue (*jama'*) when, at the beginning, its actual collection in the villages was left to revenue assignees.[1] But even at its lowest rate (and the tax was extremely regressive), the *jiziya* was equal to about a month's wages of an unskilled urban labourer, and was thus undoubtedly a heavy imposition.

The trend towards a simple direct 'maximization' of revenue was moderated by some elementary considerations of preserving and extending cultivation so as to maintain and increase the total amount of collection from year to year. Harvest failure was automatically allowed for in crop-sharing, since if the harvest was indifferent, the revenue share, as a set portion of it, would be correspondingly smaller. Under the *zabt* system, the allowance was made by excluding from assessment the area designated *nābūd* (crop-less) which could not exceed 12½ per cent of the sown area. The regulations also prescribed the grant of loans called *taqāvī*, 'strength-giving', to enable the peasants to buy seed and undertake cultivation; the loans were normally to be repaid at harvest. Lower revenue rates were granted to encourage the cultivation of waste land. The rates were gradually increased every year until the full rates were reached in the fifth year.[2]

It was symptomatic of the extent of monetization in Mughal India, that the land revenue was usually collected in cash. Under the *zabt* system, as well as the system in vogue in Bengal, the revenue demand was stated primarily in cash. Under *bhāoli* and *kankūt* too, where the revenue was levied basically in kind, there was an immediate conversion into cash at approved prices.[3] This is illustrated by the seventeenth-century documents from Rajasthan, where the quantities of grain claimed as revenue are invariably converted into cash, in which form the revenue was actually collected. It was only in some isolated regions like Kashmir or Orissa that collection was made mainly in kind.[4]

A contradiction which appears to have remained largely unresolved in the Mughal land-revenue system was the one between the desire to assess the revenue upon the individual cultivator (*āsāmī*), and the convenience of collecting the revenue from a few intermediaries (*zamīndārs*, *ta'alluqādārs*, *muqaddams/paṭels*, etc.). The individual (*āsāmīwār*) assessment was desirable because it enabled the administration to have a more accurate figure than would be achieved by a lump-sum settlement. Moreover, an *āsāmīwār* assessment was supposed to prevent an unfair distribution of the fiscal burden among the revenue payers

[1] Chandra [258], 326–7.
[2] Habib [343], 249–56, and 212 and note for *nābūd*.
[3] Abū'l Fazl [123], I, 286.
[4] For Kashmir see: Abū'l Fazl [152], III, 726. In Orissa, the use of metallic currency was exceptionally rare.

by the intermediaries. Yet our documents leave us in little doubt that the basic unit of assessment was in practice the village; and the intermediaries were the real assessees.[1] Moreover, as we shall see, large areas of cultivated land were allowed to the intermediaries revenue-free (10 per cent to *zamīndārs* in northern India, 25 per cent in Gujarat; and 2.5 per cent to village headmen); and, where revenue was levied on their lands, it was often at substantially lower rates.

The collection of revenue was enforced by severe methods. Non-payment of revenue was deemed equivalent to rebellion. While eviction was not unknown as a punishment, the more usual method seems to have been imprisonment and torture of the headmen, followed by the massacre of the adult male population and enslavement of women and children.[2]

We may hazard here some considerations of the effects of the Mughal land-revenue system on the agrarian economy. In so far as incidence per unit of area varied according to crop, and not according to the size of the taxpayer's holding, it could serve as a characteristic example of a regressive tax. This was besides the fact that the larger land-holders might, as *zamīndārs* or headmen or members of a favoured community, be required to pay less per unit of area. The fiscal burden thus rested more heavily on the small cultivator, and must, therefore, have tended to intensify the already existing differentiation among the rural population. The collection in cash would still further increase such differentiation. Those who had sufficient resources to raise cash crops would find it easier to pay the revenue upon selling the produce than those smaller peasants who grew the coarser foodgrains which at best had only a local market.

But the intensification of differentiation inherent in the Mughal revenue system was countered by yet another factor. Since taxation tended to be raised to the total surplus, the demand for revenue was bound even to exceed it in some localities at one time or another.[3] In such circumstances, it was not only the lower strata that felt the brunt of the burden of taxation; the upper strata were also ruined. Thus inherent in the Mughal revenue system was a tendency also to subvert superior cultivation, while it simultaneously increased the distance between the rich and the poor in the countryside.

[1] Habib [343], 230–3.

[2] Sarwānī's account [148], ff. 14b–15a of the proceedings of Farīd (the later Sher Shāh) in his father's territories against villagers who did not pay the revenue, 14b–15a. Manucci [110], II, 451 says: 'Everyone is killed that is met with and their wives, sons and daughters and cattle are carried off.'

[3] A *farmān* of Aurangzeb of 1666 recites that in Gujarat some *jāgīrdārs* were demanding as revenue an amount exceeding the total crop! ('Alī Muḥammad Khān [167], I, 268.)

THE JĀGĪRDĀRS

The sole claimant to the land revenue and other taxes was theoretically the emperor; but, in fact, through a system of temporary alienations of the claim in specific areas (*jāgīrs*), members of a small ruling class shared the income from the revenue among themselves. The ruling class consisted of persons who held *manṣabs* or ranks granted by the emperor. Each rank (numerically expressed) entitled its holder (*manṣabdār*) to a particular amount of pay (*ṭalab*). This could be met by a salary paid out in cash from the treasury; but it was usual instead to assign an area that was officially estimated to yield an equivalent amount of revenue. Such standing estimates of the average annual income from taxes, known as *Jama*ʻ or *Jama*ʻ *dāmī* were prepared for administrative divisions down to villages, so as to ensure exactness in assigning *jāgīrs*. Land not assigned in *jāgīrs* was known as *k͟hāliṣa*. Its revenues were collected by officials for the imperial treasury, which obtained the bulk of its income from this source. The size of the *k͟hāliṣa* varied. In Akbar's later years, it accounted for a quarter of the total *jama*ʻ in at least three provinces. Under Jahāngīr the proportion fell to as low as one-twentieth in the whole empire. Shāhjahān gradually raised it to one-seventh.[1] The remainder, i.e. the overwhelmingly larger portion of the land, lay within *jāgīrs*.

With the land revenue (and other rural taxes) accounting for the bulk of the surplus agricultural produce, the assignment of the larger portion of the empire in *jāgīrs* meant placing in the hands of a numerically very small class control over much of the GNP of the country. It, therefore, becomes important to bear in mind the character of this class, in social and economic terms. The total number of *manṣab*-holders, i.e. those eligible to receive *jāgīrs*, was no more than 8,000 in 1646.[2] Only a small portion of the *manṣab*-holders belonged to the *zamīndār* class, such as the Rājpūt, Balūch and Ghakkar chiefs. The very large majority consisted of immigrants (Tūrānīs, Īrānīs, Afg͟hāns), or (in a rather small number) recruits from the local intelligentsia and petty bureaucrats (Shaik͟hzādas, Khatrīs, etc.). The *manṣab* was not inheritable; though it was normally conferred upon sons or relations of higher *manṣab*-holders, thus creating whole families of *k͟hānazāds* who subsisted on *manṣabs* from generation to generation.[3]

The dependence of the individual *manṣab*-holders on the emperor's will was thus considerable, despite the power and resources that the ruling class enjoyed as a whole. The control of the emperor was further strengthened by imparting to the *jāgīr* a purely temporary character. A

[1] Habib [343], 271–3.
[2] Lāhorī [157], II, 715.
[3] See: Ali [212], 7–37.

manṣab-holder was entitled to a *jāgīr*, but not to a particular tract of land in *jāgīr*, and not the same land year after year. This principle was enforced partly out of deliberate design.[1] It was also an inescapable consequence of the working of the *manṣab* system. The *manṣabs* were revised from time to time to award promotions or demotions. Each alteration in *manṣab* required a change in the size of the *manṣab*-holder's *jāgīr*. But this could not be done without changes in other *manṣab*-holders' assignments. Similarly, there were transfers of officials from one province to another; in each such case, a block of territory had to be carved out for the *jāgīr* of the official in the new province. This again necessitated adjustments of *jāgīrs*. Each such adjustment meant the shifting of some other person's *jāgīr*; and that shift again could not be made without yet shifting someone else's *jāgīr*. Thus in order to keep contiguous areas in *jāgīrs* with *jama'* exactly equal to *ṭalab*, transfers had to be made all the time. The result was that no one could be sure of how long he would remain in possession of a particular area. The average period of term would be manifestly impossible to work out; but the fact that Sehwan in Sind, for example, was transferred no less than seventeen times during a period of forty-three years (1591–1634),[2] lends point to general statements such as that the *jāgīrs* were 'transferred yearly or half-yearly, or every two or three years'.[3]

A *jāgīrdār* had, therefore, no permanent rights in his assignment. His claims too were confined to 'the authorized land-revenue and taxes' (*māl-i wājibī o ḥuqūq-i dīwānī*).[4] Theoretically, he could demand no more than the authorized taxes, assessed according to the imperial regulations. He or his agents had to leave a copy of every revenue paper with the permanent local official, *qanungo*, on whose record he had to draw for preparing his assessments. He had no judicial powers, which belonged to the *qāẓī*, appointed by the emperor. A small *jāgīrdār* had no police powers either; these belonged usually to the *faujdār*, an official of some status directly appointed by the emperor.

In practice, however, the *jāgīrdār*'s powers were much less circumscribed. This was especially so, if the assignee was a big *jāgīrdār*, enjoying *faujdārī* or police jurisdiction as well.

The larger portion of land lay within the *jāgīrs* of such potentates. It has been estimated that in 1646, a mere sixty-eight princes and nobles at the top claimed 36.6 per cent of the *jama'* of the empire; the next 587 officials claimed nearly 25 per cent. On the other hand, the remaining 7,555 *manṣab*-holder claimed between a quarter and a third of the revenues.[5] Allowing for cash salaries enjoyed by some of the

[1] Abū'l Faẓl [152], II, 332–3. [2] Mīrak [156], II, 90–171. [3] De Jongh [94], 72.
[4] See the texts in *Selected Documents of Shah Jahan's Reign* [13], 17–18, 21–3.
[5] Qaisar [453], 237–43.

officials, these proportions would still indicate the high degree of concentration of *jāgīr* holdings in a few hands. The bigger *jāgīrdārs* maintained standing administrative machinery (*sarkār*) to collect revenue wherever they might be assigned *jāgīrs*. They were backed by their large military forces; and their status and authority usually rendered futile any complaints against them at the court.[1]

So great was a *jāgīrdār*'s power that it was said that 'the *ḥākim* (*jāgīrdār*) of a day can in a moment remove a *zamīndār* of five hundred years, and put in his stead a man who has been without a place for a life-time'.[2] As for peasants, the *jāgīrdārs* claimed powers to detain them on the land, like serfs, and bring them back, if they ran away.[3]

It came to be widely believed in the seventeenth century that the *jāgīrdārs* tended excessively to oppress the peasants because, unsure of holding particular areas for more than the most immediate future, they had no regard for the long-term prospects of revenue collection to restrain them in their present extortions. Bernier offered the classic exposition of this theory.[4] Not all beliefs are necessarily wrong for the sole reason that they were held by contemporaries. While undoubtedly the Mughal administration sought to take measures to regulate and moderate the *jāgīrdārs*' exactions,[5] it is not certain that these could reduce the pressure for short-term maximization of revenue by individual *jāgīrdārs*. In its cumulative effect, such pressure not only inhibited extension of cultivation, but also involved the Mughal ruling class in a deepening conflict with the two major agrarian classes, the *zamīndārs* and the peasantry.

By way of a digression, we may notice here a small, but vocal, class which too enjoyed a minor share in the revenue resources of the empire. This comprised persons who were granted *madad-i ma'āsh* (also called *suyūrghāl*) by the emperor. These grants entitled them to collect land revenue from specified areas of land, usually for life. The grant was normally confirmed upon the offspring of the grantee on his death, under certain conditions. The grantees belonged very largely to the Muslim theological and scholarly classes, besides pensioned-off officials, widows and other women belonging to families of some status. The total revenue alienated in such grants was not large: in 1595, it amounted to 4 per cent of the total in *ṣūba* Agra and slightly over 5 per cent in *ṣūba* Allahabad.[6] Being more or less permanently installed, the grantees often sought to acquire *zamīndārī* rights within their grants and elsewhere. Some of them thus transformed themselves into small

[1] Cf. Mīrak [156], 180.

[2] Sahaswānī [126], f. 51a.

[3] For the evidence on this see: Habib [343], 115–16; also the documents cited by Grover [325], 152, 155n.

[4] Bernier [102], 227 *passim*.

[5] Cf. Ali [212], 87–9.

[6] Moosvi [416], 286.

zamīndārs. But beyond this, the effect of the grantees' activities on the agrarian economy seems to have been slight.

THE 'ZAMĪNDĀRS'

The term *zamīndār* is a Persian compound meaning keeper or holder of land (*zamīn*). The suffix *-dār* implies a degree of control, or attachment, but not necessarily ownership. The use of this suffix may be seen in such compounds as *faujdār* (military commandant), *thānadār* (officer-in-charge of a military or police post), *jamā'adār* (officer-in-charge of a small body of troops), or *ṣūbadār* (governor of a *ṣūba* or province). In the fourteenth century the word *zamīndār* seems to have been used in the sense of the chief of a territory,[1] *zamīn*, like land, having also the wider meaning of a district or country. This usage continued in Mughal India, the chiefs being so designated, but the term began officially to be used more and more often from Akbar's time onwards for any person with any hereditary claim to a direct share in the peasant's produce. It was the latter sense which became predominant during the seventeenth century, the term *zamīndārī* replacing or alternating with a large number of local terms for agrarian rights of different kinds, e.g. *khoṭī* and *muqaddamī* in the Doab, *satārahī* and *biswī* in Awadh, *bhomī* in Rajasthan, and *bānṭh* or *vanṭh* in Gujarat. It was also used interchangeably (but only in agrarian contexts) with *milkiyat*, an Arabic term for ownership. In so far as *zamīndārī* became a blanket term for a miscellaneous variety of rights, it may be thought misleading to treat all such rights together, simply because the Mughal administration gave them the same name. But in fact, these miscellaneous rights had many features in common; and the very success of the new term in representing them owed not a little to this underlying identity. It is also possible that the Mughal administration too tended to introduce a further degree of uniformity by recognizing certain aspects of *zamīndārī* right, e.g. saleability and obligation to pay revenue, as applicable in the case of all rights that bore this common designation.

It would seem that the kernel of *zamīndārī* right derived from fiscal claims that survived in forms altered to varying degrees from times preceding the sultanate. It primarily existed, therefore, in the form of certain imposts which the *zamīndārs* levied on the peasants over and above the land-revenue assessments. Thus in Awadh, the *satārahī* implied a claim to take 10 *sers* of the crop from each *bīgha*, together with a cash levy of one copper coin (*dām*) from the same area.[2] This, though not insignificant, was quite a moderate demand when compared to land

[1] 'Afīf [143], 170.
[2] Habib [343], 145 and note.

revenue.[1] In Rajasthan, the *bhūmia* similarly levied a tax called *bhom*.[2] Other cesses and perquisites of *zamīndārs* such as a poll tax and a house tax, are also referred to.[3] In addition, he could levy imposts on forest and water produce (*bankar*, *jalkar*), since these are specified among the rights transferred in *zamīndārī* sale deeds.

These claims of the *zamīndār* were originally distinct from land revenue. But the role assigned to the *zamīndār* in the Mughal revenue system tended to blur the barriers. Where, as in Bengal, the *zamīndār* was called upon to answer for the payment of land revenue within the area of his *zamīndārī*, he seems to have collected the land tax from the peasants at rates fixed by custom or by himself and to have paid the amount imposed on him, in turn, by the administration. The balance left with him constituted his income. In the larger part of the Mughal empire, on the other hand, he was expected to collect the tax from the primary assessees (cultivators), in return simply for an allowance (*nānkār*) of one-tenth, given either in cash or in allotment of revenue-free land. If he failed in his duty, he would be excluded from the land altogether, but be paid 10 per cent of the land revenue as *mālikāna*, apparently in compensation for imposts and perquisites lost by him, these now presumably being added to the *māl*. In Gujarat the allowance went up to a fourth of the total revenue collected.[4]

The total income that the *zamīndārs* obtained, was probably much less than the land revenue but not perhaps as low as 10 per cent. The sale price of *zamīndārī* in five villages in 1670s and 1680s in a part of Awadh amounted to nearly 2.3 times the annual land revenue.[5] Even if the purchaser expected to obtain no more than a return of 10 per cent per annum on his investment, his net income should have been nearly a quarter of the land revenue. Since, as we shall see, he had to maintain an establishment to realize his claims, his gross income, or the total amount extorted by him from the peasant should have been much more still, possibly amounting to two-fifths of the land revenue. However, in Bengal, rather surprisingly, the sale price of *zamīndārī* is the only case where a comparison is possible, barely exceeds the annual land revenue.[6]

[1] According to the crop rate fixed by Sher Shāh the land revenue on a *bīgha* of wheat amounted to 4 *mans*, 12¾ *sers*. Since 1 *man* = 40 *sers*, the *satārabī* rate on a *bīgha* of wheat would be equal to about 6 per cent of Sher Shāh's revenue rate.

[2] Gupta and Moosvi [338], 353–60. The *bhomī* ranged from 1 per cent to 4.25 per cent of the land revenue in the two *parganas* of Narāina and Malārna ([338], 355).

[3] Habib [343], 150.

[4] Habib [343], 146; Grover [327], 170–2, 259–61.

[5] Habib [343], 151–3. See also: Habib [347], 207–9, for a document of 1530 from Shamsabad (Fatehgarh district, Uttar Pradesh), which yields an almost identical ratio of sale price to land revenue.

[6] The case is that of the English Company's purchase of the *zamīndārī* of the villages constituting the nucleus of the future city of Calcutta in 1703: Sale price, Rs. 1,300. Annual land revenue: Rs. 1,194, as. 14. It is possible, however, that this was an exceptional transaction, and the *zamīndārs* were compelled to part with the villages at a depressed price (cf. Blyn [235], 121–2).

The *zamīndārs* often claimed to derive their right from settling a village and distributing its land among the peasantry. Conversely, they were often credited with the right to evict peasants at will.[1] A seventeenth-century jurist admitted that the peasants conceded this right to their *zamīndārs*, although he asserts that the exercise of such power on their part was a usurpation.[2] Quite probably, so long as land was abundant, the right to evict the peasant had much less significance than a right to detain him.[3] There is no evidence, however, that the *zamīndārs* exercised any power of restraint over the peasantry.

Historically, the *zamīndārī* right had close association with caste or clan dominance. *Zamīndārs* of a locality often belonged to the same caste. Moreover, a *zamīndār* needed not only the support of his kinsmen, but also the possession of retainers (*ulūs*) and forts (usually of mud, *gaṛhīs*, *qil'achas*) to protect and enforce his claims. The *Ā'īn-i Akbarī* in its celebrated 'Account of the Twelve *Ṣūbas*', not only records the *zamīndār* caste or castes, but also the number of horse and foot employed by the *zamīndārs*, in each *pargana*.[4] The *zamīndārs* thus formed a semi-military class, who could not be ignored politically by any régime.

At the same time, the *zamīndārī* right was in itself an article of property. It was inherited according to the same laws and customs as governed the inheritance of other property. We find ordinary *zamīndārīs* usually broken up into equal shares for distribution among sons.[5] Still more striking was the way in which *zamīndārī* right was freely sold.[6] This indicates not only a high degree of monetization: some *zamīndārīs* were actually mortgaged to professional moneylenders.[7] The saleability of *zamīndārī* right also enabled persons who had accumulated wealth out of the extraction of land revenue, such as petty officials, revenue grantees, etc., to transform themselves into *zamīndārs*. It is, however, rare to find merchants buying-up *zamīndārīs*.[8]

A very important feature of the *zamīndārī* right was what may be called the 'uneven development'. That is, within the same district some villages would lie in a full-fledged *zamīndārī* in the possession of a few persons; other villages would be largely peasant-held (*ra'iyatī*), with no

[1] Habib [343], 143–4.
[2] Muḥammad A'lā [125], f. 44a.
[3] Cf. the observations of Mackenzie [397], 96: 'Land being more abundant than labour, in general the zemindar has greater reason to dread the desertion of his Ryots than they to fear expulsion from their lands. The instances accordingly would appear to be few in which the zemindars have actually exercised their doubtful right of dispossession.'
[4] Cf. Habib [340], 320–3.
[5] Habib [343], 154–7; Grover [327], 272–3.
[6] Habib [343], 157–8.
[7] Habib [347], 217, 231.
[8] The English factors at Surat in 1644 reported that the merchants could not invest their idle capital in land because they could not find any 'firme estates in land to be purchased' (Foster [31], 184).

recognizable persons as *zamīndārs*.[1] The limits between the two zones were by no means fixed. Peasants of a village might sell away their rights to a person, who would thus become the *zamīndār* of that village.[2] In less orderly circumstances, force might also create a *zamīndārī* right where none existed before.[3] Finally, the Mughal administration too might not only supplant *zamīndārs*, but even create new *zamīndārīs* over peasant villages.[4] At the same time, there are numerous instances of fresh villages being settled without the intermediation of *zamīndārs*; so that it is by no means certain that the proportion of villages under *zamīndārs* increased in course of time, at the expense of peasant villages.

VILLAGE COMMUNITY

To astute observers like Bernier, the Indian peasants, *laboureurs*, appeared an undifferentiated mass, all living miserably under a blind and increasing oppression.[5] The picture was not an unfair one; it does not also conflict with the concept, developed later, of the Indian rural population divided up horizontally among 'village communities' each a self-sufficient entity, left to its own devices by the despotic régime of the court so long as the heavy land-tax was paid.[6]

In point of fact, however, the picture would seem to have been a far more complex one. As we have seen in chapter VIII, economic differentiation had progressed considerably among the peasantry. There were large cultivators, using hired labour, and raising crops for the market; and there were small peasants, who could barely produce foodgrains for their own subsistence. Beyond this differentiation among the peasantry, there was the still sharper division between the caste peasantry and the 'menial' population, a primitive landless proletariat, which served as the reserve for supporting peasant agriculture.

Both these phenomena found their reflection in agrarian relationships. The peasants carried on cultivation in separate fields. The *khasam*, land-holder, remained the claimant to the harvest, irrespective of the labour done on his field by the hired watchman. The peasant, or *kirsān*, was similarly said to be the master at whose behest the reapers (*lāvas*) worked on his field.[7] But these separate holdings implied more the claims to harvests upon them than claims for the permanent possession

[1] Habib [343], 141–3. Cf. Grover [327], 166 ff. A different view of the classification is suggested by Siddiqi [500], 76–7.
[2] Cf. Habib [347], 215, 231 for the evidence of a document of 1611.
[3] Habib [343], 159–60.
[4] An example of such creation is to be found in a *parwāna* contained in: Malikzāda [18], 152, giving the terms of the grant of a *zamīndārī* near Mathura.
[5] For the term *laboureurs* used by Bernier, see: Moreland [428], 147n.
[6] See the classic exposition in: Marx [411], 350–2.
[7] Habib [344], 2.

of particular plots of land. Once the harvest was removed, the peasant felt no longer tied to the land.[1] The ease with which peasants were prepared to shift their fields was reflected in a whole category of peasants known as *pāikāsht*, who undertook cultivation in villages other than their own.[2]

Depending upon their resources in seed, cattle and money, peasants might cultivate larger or smaller fields. But larger land-holdings were linked to, and often resulted from, a superior position or status secured either as headmen (*muqaddams*, *paṭels*), or as members belonging to dominant elements of the village (*kalāntarān*), in contrast to the general run of the small peasantry, the *reza riʿāyā*. The village headmen often had revenue-free allotments, amounting to 2½ per cent of the total;[3] and the superior elements were often assessed at lower rates of revenue than the ordinary peasants.[4] This constituted, besides the inherently regressive nature of land revenue, an important source of economic strength of the richer peasantry.

Another source of their strength lay in the nature of the village organization, or the so-called village community. The view of the village community as a democratic, or primitively democratic institution, which tended to break down as money economy advanced, or as powerful elements grew within it to subvert it,[5] seems questionable. There was much truth in Baden-Powell's assumption that it was associated with the land-revenue system;[6] and thus was not invariably the simple survival of a primitive age. Inasmuch as it was convenient for the revenue authorities to treat the village as a unit for collection (and even assessment), it was natural for them to rely upon the headmen or a small stratum of upper peasants. This dominant group, then, collected the tax at rates fixed by themselves from every peasant, putting the collection in a pool (*foṭa*), with its accountant, the *paṭwārī*. From this pool the land revenue would be paid, so also the fees and perquisites of certain officials, and certain common expenses of the village. The village could also act as a 'legal person', since we find a loan being taken on behalf of the village from a moneylender, presumably in order to meet the revenue demand in a lean year, the loan being repaid out of the village pool.[7] There was no necessary connection between the operation of this pool, and the customary payments made for the services of artisans by individual villagers.

[1] Cf. Munro in 1807 [298], III, 510: 'In the Ceded Districts and throughout the Deccan, the ryot has little or no property in land – he has no possessory right; he does not even claim it. He is so far from asserting either a proprietary or possessory right that he is always ready to relinquish his land and take some other, which he supposes, is lighter assessed.'

[2] Chandra [262], 51–64.

[3] Abū'l Fazl [123], I, 285.

[4] Cf. Singh [507], 301–2.

[5] My own earlier view, expressed in: Habib [343], 128–9.

[6] Baden-Powell [225], I, 137.

[7] Habib [343], 127.

Those who controlled the pool usually evaded paying their due share of revenue. Lower rates were also levied upon some favoured elements, the *khwud-kāsht* peasants in northern India, *gharuhālas* in Rajasthan and *mīrāṣdārs* in Maharashtra.[1] Such a favoured category of peasants was found in almost every part of the country. The smaller peasants, *reza riʿāyā* (*maltis* in Rajasthan, *kunbīs* in Maharashtra) forming the bulk of the peasantry, were thus called upon to pay more than their due share of the revenue in order to make up the total. It was common in Mughal administrative literature to bemoan such exploitation of the smaller peasantry by the 'dominant elements' within the village.[2] However, while the arrangement tended in the long run to intensify the pressure upon the smaller peasantry, in the shorter run it enabled land revenue to be collected with far less difficulty than if the village had been disregarded and arrangements made with every individual revenue payer (*āsāmīwār*), as the administrative decrees so insistently recommended.[3]

The 'village community' was thus rife with internal contradictions: we have echoes of these even in the verses of Kabīr and Arjan, where the payment of revenue is the crux of the dispute.[4] The contradictions, indeed, arose to a very large extent because the village community offered a framework for 'sub-exploitation', that supported, as well as subsisted upon, the Mughal land-revenue system.

Of the position of the menial castes, who must have formed a fifth or a quarter of the rural population, our knowledge is extremely limited. We can infer from what was the case later on that they could not hold land or cultivate it on their own, except for very small fields or plots which were allotted to them as village servants (e.g. *balāhars*, the village sweepers). The 'menial' population formed a reserve to be called upon to work in the fields during harvests; they were also uniformly liable to render forced labour (*begār*), for carrying baggage, etc. of the higher classes.[5] The possession of a rural proletariat on this scale, much before the coming of capitalistic agriculture, is surely a unique achievement of the Indian civilization.

2 The medieval Deccan and Maharashtra

Some glimpses can be obtained of the internal structure of 'village communities' only in the western Deccan for the seventeenth and

[1] Cf. Grover [326], 4; Singh [507], 300–1.

[2] See, for example, Akbar's minister Todar Mal's denunciation of 'the bastards and the headstrong [of the village] who keep their own share [of revenue], transferring it to the *reza riʿāyā*' (*Akbarnāma* [151], f. 332b). See also: Aurangzeb [16], *Farmān* to Rasikdās, Art. VI.

[3] Habib [343], 230–3.

[4] Cf. Habib [344], 2–4.

[5] Habib [343], 120–2.

eighteenth centuries. Their structure seems to have been almost the same in the eastern Deccan as well,[1] though there was some difference in the western coast area called Konkan.

The village of the medieval western Deccan was called *gānva* (from Sanskrit *grāma*), *mauje* (from Arabic *mauẓa'*), or Persian *deh*. These terms were used interchangeably, but formally *mauje* was prefixed to the proper name of the village. A bigger village containing a market-place (*bājār*, Persian *bāzār*) was called *kasbe* (from Arabic *qaṣba*).

The villages as a rule took the collective form of habitation. There, the 'village-site' was called *pānḍharī* (literally 'white') and usually surrounded by earthen walls. Outside the village site there were agricultural lands called *kālī* (literally 'black'). It is said that people originally inhabited the white soil unfit for cultivation and turned the black soil widely found in the Deccan into their agricultural fields. Beyond them there was village common or grassland called *kuran* or *gāyerān* (literally 'waste land for cows'). The grassland meant for common use of villagers was termed 'people's grassland' (*lokācā kuran*) and that for fodder used by government was called 'government's grassland' (*sarkārcā kuran*).

Agricultural land (*kālī*) was divided into perhaps twenty to forty blocks called *thal* (from Sanskrit *sthala* = land), and each block had often a name that was probably the surname of the original proprietor or colonizer. Each block was composed of fields variously called *śet* or *set* (from Sanskrit *kśetra* = field), or *jamīn* (from Persian *zamīn* = land). Occasionally Sanskrit *bhūmi* (land) was also used to mean the fields.

To put the matter in another way, *kālī* would be divided into (1) ordinary owned land (*mirās jamīn*), (2) gifted or exempted land (*ināṃ jamīn*), (3) state land variously called 'demesne of the government' (*sarkārcī serī*), 'demesne fields' (*serīcen śet*), 'demesne' (*serī*) or 'treasury land' (*khālsā jamīn*), and (4) land of extinct families (*gatkūl jamīn*) or waste land (*paḍ jamīn*).

On the other hand, villages would consist of (1) hereditary village-officers such as headman (*pātīl* or *mokadam*), accountant (*kulkarnī*), and assistant headman (*chaugulā*), (2) proprietary peasants called *mirāsdārs* in Persian, or *thalkarī* or *thalvāīk* in indigenous terms, (3) temporary peasants or tenants called *uparī* (literally 'strangers'), and (4) village-servants and artisans collectively called *balutedārs* or *bārā balutedārs* (literally 'twelve holders of *balute*'). While the headman was usually of Kunbī (peasant) caste (which was later to become assimilated into Maratha caste), the accountant was generally a Brahman because of his literacy.

Village officers used to own more or less large *mirās* (Persian *mīrāṣ*)

[1] Sherwani [498], 190–1.

land and be allowed by the government to have some *inām* (Persian *in'ām*) land as well. Moreover, they were entitled to enjoy certain rights and privileges (*baklavājima*) to receive some amount of produce from peasants and village artisans. Their office and accompanying *inām* land as well as privileges were called *watan* (literally 'patrimony' in Arabic), which was not only heritable but saleable and transferable with acknowledgement of state authorities and village assembly. On the other hand, *mirāsdār* peasants, mostly Kunbīs by caste, were permanent residents of the village and bore the regular revenue and miscellaneous cesses for the state on their *mirās* land in which they held a fairly complete proprietory right. Though it was not a frequent practice, they could sell their own land from the late sixteenth century. For instance, a Quṭbshāhī *farmān* of the year 1594 states that a Muslim gentleman 'bought places by paying money to peasants (*ri'āyā*) and other persons' in a village located in Petalchor sub-district, and obtained the legal documents for the same from a Qāẓī,[1] though the kind of land so bought and its price are not mentioned. Then about the middle of the eighteenth century a *mirāsdār* peasant of Poona district sold seven *bighas* of his orchards with wells and trees thereon to a peasant of a nearby village for Rs. 250 as a *mirās* land, and gave him a sales deed attested by the headman and accountant of the village as well as by those of nearby villages.[2] In the eighteenth century, at the same time, village headmen were entitled to appropriate the waste land of their villages as their own *mirās* land, and village assembly also could dispose of waste land as *mirās* land through sale or gift to willing peasants.[3]

Uparī peasants were temporary residents of the village, who had left their home villages due to famine, devastation caused by wars and so on, and become migratory. At any rate they are stated to have been a minority of peasants in the seventeenth century.[4] They would make an agreement with the village headman to cultivate state land or waste land therein and pay a certain amount of rent. It is also certain that many of them were tenants on *inām* land owned by village officers, temples, *deśmukhs*, *deśpāṅdes*, and so on. They might also cultivate the *mirās* land of comparatively wealthy *mirāsdārs* till the middle of the eighteenth century, though this point is not yet definite.[5]

Village servants and artisans called *balutedārs* included the carpenter, blacksmith, potter, shoemaker, ropemaker, barber, washerman, astrologer, temple-keeper, mosque-keeper, (being butcher as well), Mahar (an untouchable caste engaged in sweeping, watching and other menial

[1] Y. H. Khan, ed. [10a], 29. Also refer to Kulkarni [387], 71–3.
[2] Fukazawa [305], 39–40.
[3] Fukazawa [305], 44–7.
[4] Kulkarni [386], 39. Also see: Kulkarni [387], 71.
[5] Fukazawa [305], 52–6.

works), and so on. Their composition was fairly uniform though their number varied according to the size of the village. They were expected to serve villagers whenever required in their respective capacities fixed by their castes, and were paid the remunerations at two harvests of the year usually in kind, but occasionally in cash, such remunerations being called *balute*. Besides these they were entitled to certain shares of offerings dedicated to village temples, and to some other perquisites on special occasions. Moreover, many of them were given by the village a small plot of *inām* land, which was as a rule cultivated by themselves. On the other hand, like the peasants, *balutedārs* were divided into permanent and temporary residents of the village. The right to serve and the right to receive various remunerations of permanent *balutedārs* was clearly recognized as their *mirās* or *watan*; hence *mirāsdār balutedārs* (or *watandār balutedārs*). Their *mirās* was heritable and transferable. The temporary *balutedārs* were naturally entitled to receive rewards so long as they worked in the village, but were called *uparī balutedārs* and not recognized as *mirāsdārs*.[1]

It should be clearly borne in mind that the *balutedārs* were not employed by individual peasant families (as under the '*jajmāni* system') but by the village as a territorial whole. There were broadly three methods of paying *balute*-remuneration to them, probably corresponding to three different systems of payment of land revenue to the government. The first method corresponded to the *baṭāī* system; all the peasants brought their respective produce to a certain place in the village and gave customary shares of it to each category of *balutedārs*. The second method was in the line of the system where each peasant paid a certain fixed amount of his produce to the state; after inspecting the state of harvest, the village headman got every peasant to pay a certain portion of his produce to each category of *balutedārs*. And the third method was when the revenue was paid in cash, where each category of *balutedār* would receive a certain amount of cash ranging from Rs. 10 to 2½ per year. At any rate, each category of *balutedār* was considered to hold one *watan* per village, and the amount of remunerations was fixed per *watan*. When a *watan* was shared by several families of the same occupation or caste, what was divided was not the sphere of work but the remuneration for the *watan*; the lump amount whether in kind or in cash was to be divided among themselves. In the medieval western Deccan village, perhaps only the priests were employed by certain specific families under the typical '*jajmāni* system'.[2]

The village assembly called *gota*, *gota sabhā*, or *majālis* (or *pancāyat* in the eighteenth century) was presided over by the headman and attended by peasants and *balutedārs* both holding *mirās*, *uparīs* – whether peasants

[1] Fukazawa [308], 20–5. [2] Fukazawa [308], 25–39.

or *balutedārs* – having no voice in it. The assembly would decide village affairs such as dispute over lands and rights, disposal of waste lands, and so on, and attested the transfer of lands and rights in *watan* (or *mirās*). It sometimes intervened in the caste matters of villagers, though there was a separate caste-assembly (*gota* or *jāti sabhā*) for the members of each caste residing in the same region. The village was responsible to the state for arresting criminals, compensating for the value of goods stolen or tracing them as far as the next village.[1]

SIZE OF LANDHOLDINGS: ECONOMIC DIFFERENTIATIONS AMONG PEASANTS

Whereas the general structure of the village as described above was fairly stable throughout the period under review there developed, within the stable frame, considerable economic differentiations among the peasants possibly due to the revenue system, state promotion of cultivation, system of inheritance, individual availability of capital and labour, natural as well as man-made calamities, and so on. They were not only divided into *mirāsdārs* and *uparīs*, but also into the comparatively well-to-do and the poor. The following tables show the land distribution among the 'landholders' (presumably including both *mirāsdārs* and *uparīs*, but excluding the *ināmdārs*) in two villages in the western Deccan, though the dates are slightly beyond the scope of this volume.

The figures in Table 7 may show that firstly, there did exist economic

Table 7. *Land distribution in Pimpal Saudagar*

	Year		
	1771–2	1791–2	1797–8
Total number of landowning cultivators	19	35	28
Number with more than 30 acres of land	12	0	2
Number with 20–30 acres of land	6	10	9
Number with 10–20 acres of land	1 (10 acres and below, combined)	14	10
Number with 5–10 acres of land		4	7
Number with less than 5 acres of land		7	0
Largest individual holding	74 acres	28 acres	56 acres
Smallest individual holding	7 acres	2.33 acres	6 acres
Average size of holding	40 acres	21 acres	26.5 acres

Source: Harold H. Mann, *Land and Labour in a Deccan Village* (University of Bombay Economic Series no. 1, Oxford University Press, 1917), 43–4.

[1] Gune [332], chapters 2–4.

Table 8. *Land distribution in Jategaon Budruk*

	Year	
	1790	1803
Total number of landholders	34	24
Number with more than 100 acres of land	1	1
Number with 50–100 acres of land	6	8
Number with 20–50 acres of land	24	15
Number with less than 20 acres of land	3	0
Largest individual holding	108 acres	108 acres
Smallest individual holding	18 acres	36 acres
Average size of holding	43 acres	51 acres

Source: Harold H. Mann and N. V. Kanitkar, *Land and Labour in a Deccan Village*, Study no. 2 (University of Bombay Economic Series no. III, Oxford University Press, 1921), 41.

differentiations among peasants in any case; secondly, that while there were considerable fluctuations of landholdings in different years in any of the two villages, fairly rapid fragmentation of landholdings went on in Pimpal Saudagar till 1791–2, and there was a decrease in the total number of landholders in both the villages after 1790–2 probably due to a famine in 1792–3.[1] Thirdly, whereas the comparatively well-to-do (more than 20 acres in the former and beyond 50 acres in the latter village) slightly increased their number, the relatively poor (less than 20 acres in the former and 50 acres in the latter village) more or less decreased, and the poorest totally disappeared after 1790–92.

ZAMĪNDĀRS: DEŚMUKHS AND DEŚPĀṄDES

From ten to two hundred villages formed a sub-district called a *pargana* and so on, and each sub-district had one or several hereditary chiefs (*deśmukh* or *desai*) and hereditary accountants (*deśpāṅde*), the former being usually peasant by caste and the latter, as a rule, Brahman. In the official documents they were often called *jamīndār* (viz. *zamīndār*), though all the hereditary officers including village ones were sometimes collectively termed *deśak*. At any rate the *zamīndārī* system of the north Indian type (i.e. the so-called primary zamīndārī system) was generally absent in the Deccan.[2]

[1] Etheridge [295], 87.

[2] Though some modern historians mention 'primary *zamīndārs*' in the western Deccan, this seems to be nothing more than *mirāsdārs* or peasants (*ri'āyā*), cf. M. Alam [209], 76, 80, 81–7. In the eastern Deccan, too, *zamīndārs* usually meant regional (*pargana*) aristocrats; *nāyakas*, *muniwars*, *deśmukhs*, *deśpāṅdes* and so on. See Richards [467], 108–34.

In the ʻĀdilshāhi kingdom as well as in the Quṯbshāhī kingdom, the *zamīndārs* were responsible for collecting the revenue and other exactions from the village headmen and paying them to the authorities especially in the assigned area, though in the crown districts their function of collecting revenue was much reduced and they were no more than checks on, as well as collaborators of, the collectors of government. In any case, however, they were obliged to maintain a certain number of militia to keep the region in peace and order and to join defensive as well as offensive fighting for the king. As the reward for these functions, they were allowed by the state to have a certain number of revenue-free *inām* villages, to hold *inām* land in many other villages, and to collect certain perquisites from every village under their jurisdiction. Like village officers, their office and accompanying privileges were clearly understood as *watan*, which was not only heritable but also transferable to others, such transfer actually taking place occasionally. As a matter of fact *zamīndārs* could be seen, as it were, as feudal owners of their *inām* villages and *inām* lands, who exacted rents and cesses subject only to local usages. And they exercised certain overlordships over all the villages under their charge.[1]

As mentioned in chapter VII, Malik ʻAmbar of the Niẓāmshāhī kingdom made efforts to reduce the power of *zamīndārs* and deprive them of their function of revenue collection. Following this example, Shivājī of the Marathas, once having established his authority, tried to do away with *zamīndārs* in revenue collection and have a direct contact with village headmen by means of his official collectors, although *zamīndārs* were allowed to hold their *inām* villages, *inām* lands and other perquisites as the reward for their military duties as well as their function of checking the official collectors. His policy towards them seems to have been fairly successful and carried over to the eighteenth century.[2]

LAND AND VILLAGE IN INĀM

Herditary officers of sub-districts were not the sole holders of land and village in *inām*. Kings and peshwās of the Marathas as well as preceding Muslim kings of the Deccan used to give waste land as *inām* to distinguished servants of the state, noted temples, monasteries and mosques, in addition to the hereditary officers of sub-districts and villages. The more important of them were given villages in *inām*. *Inām* was as a rule free from revenue, though sometimes lighter revenue called *ināmpattī* was levied. At any rate *inām* land was often as large as half a *cāvar* to two *cāvars* (one *cāvar* being 120 *bighas*). Such a large *inām* land when owned by such local magnates as shown above would be usually

[1] Fukazawa [304], 48–56; Richards [467], 27–8.

[2] Sen [486], 38, 96, 243–51.

cultivated by tenants (presumably *uparīs*) on a fifty-fifty crop-sharing basis.[1] And it seems that *ināms* including lands and villages were fairly large as compared with the revenue of the state, for an inquiry conducted from 1843 to 1863 showed that income from *ināms* of all kinds in the region was almost equal to the *svarājya* of the Maratha kingdom amounting to 16 per cent of the land revenue of the region, about half of which were held by *deśaks*.[2] Whereas land revenue was considerably increased since the British conquest due to the expansion of cultivation, new *ināms* were not created as a rule, so that the proportion of *ināms* in total land revenue during the Muslim and Maratha periods must have been far more than 16 per cent.

As mentioned before, the holders of villages and large lands in *inām* exercised, as it were, feudal authority on the people on the lands. Though some of the medieval rulers such as Malik 'Ambar and Shivājī tried to reduce the power of local magnates like *zamīndārs*, yet many large *ināmdārs* such as *deśmukhs*, *deśpāṅdes*, and the like had to be maintained and created throughout the medieval period, for such was not only the custom of the time but the political and social necessities compelled medieval rulers to admit and rely on the landed interests.[3]

LAND REVENUE

We will begin with an examination of the nature of land revenue in the Maratha kingdom. As already mentioned there were broadly four categories of agricultural lands: *mirās* land, *inām* land, state land, and waste land including land of extinct families. The last category of land formally belonged to no one; it could be appropriated by the village headman or disposed of by the local, or village assembly, as *mirās* land burdened with regular land revenue, or the state could give it in *inām* usually exempted from revenue burden. As we have already pointed out, fairly complete private ownership was recognized in *mirās* land as well as in *inām* land. Accordingly, in the official Marathi records of the eighteenth century, we can almost certainly find a distinction between the imposition upon *mirās* land to be paid by *mirāsdars* to the state and that upon *inām* land to be paid by tenants to *ināmdārs*. The former imposition was called *sārā* while the latter was called *dhārā*. In other words, *sārā* may be translated as land tax, and *dhārā* as rent. Similarly imposition upon the state land as well as newly cultivated waste land was also termed *dhārā*,[14] hough it is not clear whether there was any

[1] Fukazawa [305], 40–2, 48.
[2] Etheridge [296], 90.
[3] For the importance of the local magnates in the local administration of the medieval Deccan states, see Alam [209], 78–80, 86–91.
[4] Fukazawa [305], 46–7 for *sārā*, and 54, 58 for *dhārā*.

difference in the scale of burdens between the two kinds of state impositions, for they were usually levied in cash on different crops and different soils through very complicated procedures.

The fact that the land revenue, whether tax or rent, was as a rule assessed and levied in cash on different soils and different crops after very complicated procedures,[1] makes it very difficult for us to estimate the probable proportion of revenue in the produce of the soil. Revenue was, however, sometimes assessed on the crop-sharing basis (*baṭāī* or *vātekarī*). And as pointed out before, Shivājī fixed the revenue burden at from one-third to two-fifths of the produce. The rate was gradually raised to up to two-thirds at least in some regions by the middle of the eighteenth century.[2] Whatever the exact rate may have been, there is hardly any doubt that the revenue rate was gradually increased during the eighteenth century. An interesting example may be found in a village named Jategaon Budruk, 25 miles north-east of Poona. The gross revenue actually collected from this village rose from Rs. 275 in 1697 to Rs. 526 in 1724, Rs. 1173 in 1730, Rs. 650 in 1767 and so on partly due to the extension of cultivation. But revenue per acre was also increased there from As. 15–8 in 1697 to Rs. 1–8–0 in 1724 and Rs. 1–5–9 in 1770, though there was a large fluctuation caused by the state of harvest.[3]

Extension of cultivation and increase in the people's capacity to bear the revenue burden seem to have been largely affected above anything else by the peace and security of the country and encouragement by the state. For instance, the village Jategaon Budruk referred to above had only 17 per cent of its agricultural land actually cultivated by a few 'land-holders' in 1697 when the political condition of the area was extremely unstable, though their exact number is not clear. The total number of 'land-holders' of the village increased from six in 1724, to nine in 1727, fourteen in 1730 and forty-two in 1785, many of whom appear to have been new cultivators of waste land under the assurance (*kaul*, Persian *qaul*) of government. Later, when political stability became disturbed, their number dwindled to thirty-four in 1790, twenty-three in 1796, twenty-four in 1803, and thirty-six in 1817 when the Maratha rule came to an end. Five years later in 1823 when 'Pax Britannica' had been firmly established their number again increased to fifty.[4]

As to promotion by the state, Shivājī, or rather his steward Dādājī Kondadev is said to have invited new cultivators into *svarājya* and encouraged the cultivation of waste land by such means as low assessment with later increase (*istavā*) and advance of money and grains

[1] For the details of the methods of assessment of land revenue, see: Sen [486], 277–89.

[2] Sen [486], 307.

[3] Mann and Kanitkar [405], 36; Mann [404], 128.

[4] Mann and Kanitkar [405], 40–1; Mann [404], 125–6.

(*taqāvī*). It seems also that cultivation of cash-crops like turmeric, hemp and sugar cane was specially promoted. During the Peshwā period when financial difficulty became acute and the revenue rate was raised, the cultivation of waste land and of cash-crops such as mangoes, coconuts and betelnuts was specially encouraged by the state by similar measures, and such a promotion became a duty of local officials. Government sometimes encouraged the construction and repair of dams and wells, too, and gave money to those who were willing to do so. Those peasants who actively responded to the state encouragement of the cultivation of waste land seem to have been *uparīs* rather than *mirāsdārs*. At any rate they were usually exempted from land revenue for some years.[1]

Incidentally, under the Peshwās, ordinary Brahmans, not to speak of government officials were usually treated with special favour in revenue matters and exempted from forced labour.

ASSIGNMENT OF REVENUE

A large portion of revenue was more or less assigned to the officials and aristocrats in the medieval Deccan states. In the Deccan Muslim kingdoms the high-class officials and nobles as well as the middle-class officials were as a rule temporarily assigned the revenue from a certain region, such assignments being called *muqāsā*. The assignees, and especially the large ones, exercising wide administrative power over the assigned areas, were virtually in a position to collect as much as possible through their agents, and the collection was often farmed out to a series of lessees at least in the Quṭbshāhī kingdom, though the collection was subject to the local usage on the one hand, and to the strength of the hereditary officers of the sub-districts, as well as of the villages, on the other.[2]

When the Mughals conquered the Deccan, the revenue assignment was renamed *jāgīr*, the recognized amount of collection specifically fixed, the assignee's administrative power restricted, and the farming of collection prohibited, though the collection of the full amount was often difficult due to Maratha incursions, strong opposition or non-cooperation of local hereditary officers, instability of public order and so on, though *jāgīrs* were not so deficient in the Mughal Deccan as is sometimes alleged.[3]

As mentioned before, Shivājī is believed to have been opposed to granting assignment to his officials inside his *swarājya*, though even this

[1] Sen [486], 92–3, 278–304. For the state encouragement of cultivation of waste land, see Fukazawa [305], 60–1.

[2] Fukazawa [304], 60–6; Richards [467], 22, 24–7.

[3] Richards [467], 169–70, 192–203. Also see Alam [209], 86–9.

point is still disputed.[1] At any rate he exacted one-fourth (*chauth*) and one-tenth (*sardeśmukhī*) of the revenue from foreign territories. *Sardeśmukhī* as well as one-fourth of the *chauth* was meant for the king, and the remaining three-fourths of the *chauth* were called *mokāsā* or *saranjām* to be distributed among generals to maintain their military forces. When the foreign territories paying *chauth* and *sardeśmukhī* became annexed to the Maratha confederacy in the early eighteenth century, the remaining three-fourths of the revenue came to be called *jāgīr* and recognized as the perquisite of the Maratha feudatory barons who had conquered the region. Accordingly a number of agents representing various grantees and claimants used to visit one village after another and exact their shares and some extra cesses. This situation tended to lead to increasingly excessive demands from the people. Moreover, even inside *svarājya*, a large number of *jāgīrs* and *saranjāms* big and small were assigned to nobles and high-class officials both by King Shāhu and the Peshwās. The big assignments became hereditary, and sub-infeudation and farming revenue were to become the order of the day about the middle of the eighteenth century, accelerating the financial difficulty of the central government on the one hand and aggravating the burdens upon the people on the other.[2]

Similarly the large *jāgīrs* of the Mughal Deccan also started to become increasingly hereditary from the early eighteenth century.[3]

CONCLUSION

Though the general structure of the village in the medieval Deccan was fairly uniform and stable throughout the period, the size of landholdings, certainly much larger than in the modern period, fluctuated considerably because of natural and political situations, and many other possible causes, resulting in remarkable economic differentiation among the peasants.

Above the village there were hereditary officers of the sub-district usually called *zamīndārs*, each of whom was a type of feudal lord within his jurisdiction and who exercised wide administrative power over it with his own militia. They were recognized by the state power as holding several villages in *inām* as well as *inām* lands in other villages, and receiving certain portions of state revenue and customary perquisites from all the villages under their charge. But their powers, and especially those related to the collection of revenue for the state, were more-or-less reduced in the crown districts of the Deccan Muslim kingdoms, and in the Maratha *swarājya* since the time of Shivājī.

[1] Chandra [260], 258–62.
[2] Sen [486], 273, 275–7.
[3] Richards [467], 234.

Apart from petty *inām* lands customarily recognized as perquisites of village artisans and servants, the medieval Deccan states often granted lands and villages in *inām* to distinguished servants of the state, noted monasteries, temples and mosques; and the income from all sorts of *inām* was by no means small.

In the medieval Deccan there seems to have been a conceptual distinction between the tax and rent corresponding to the different categories of agricultural land. At any rate, the revenue was assessed and levied usually in cash on different crops and soils, thus making it extremely difficult to estimate the actual revenue burdens as a proportion of the total produce of the soil. But there is hardly any doubt that the total revenue burden as well as per-acre assessment was gradually increased in the eighteenth century as compared with the seventeenth due to the financial difficulties of the Peshwā government. On the other hand, the Maratha government, at least, encouraged now and then the extension of cultivation to waste land by offering various favourable terms to the peasants, presumably the *uparīs* of other regions.

However, a large portion of revenue was more or less assigned temporarily to the state officials and aristocrats as their salary. Whereas in the Deccan Muslim kingdoms the assignees widely exercised the administrative authorities over their assigned territories, the Mughals successfully curbed such authority and specified the amount to be collected during the seventeenth century.

Shivājī of the Marathas also temporarily assigned at least the regular tributes from foreign territories to his high-class officials. But in the eighteenth century Shāhu and his Peshwās not only made the assignments to their barons who had conquered foreign territories hereditary, but created a large number of hereditary assignments even inside the *swarājya*. And this trend above all worsened the financial difficulty of the central government and increased the revenue burden upon the people. A similar trend towards making the big assignments hereditary also developed in the Mughal Deccan in the eighteenth century.

CHAPTER X

NON-AGRICULTURAL PRODUCTION

1 Mughal India

Assessments of India's past as a manufacturing nation differ widely. According to one view, in pre-colonial days the country had an industrial sector of exceptional buoyancy. An unending flow of precious metals poured into the country from all over the civilized world in payment for her fine manufactures. Western observers from Pliny to Bernier noted with disapproval the region's economic role as the sink for the world's precious metals. The vigorous export trade had its counterpart in national self-sufficiency: imports were redundant and an affluent adequacy of output characterized the economy of the self-contained 'village republics'. Thus India was a leading manufacturing nation at least at par with pre-industrial Europe. She lost her relative advantage only after Europe achieved a revolution in technology, and her prospects of following suit were undermined through the intervention of colonial rule.

This image of high economic achievement has been questioned by others. Gibbon's description of the staples of oriental trade as being 'splendid and trivial' has been held to be true of India's exports as well. Besides, given the transport technology of the period, the volume of exports, it is pointed out, was bound to be negligible in relation to the overall magnitude of economic activity. Technology in general was rather primitive and almost totally stagnant: by inference, productivity was low and equally stagnant. Self-sufficiency, far from being an indicator of a high level of performance, simply reflected a weak articulation of exchange and hence reinforced a stagnation in manufacturing output. The double tyranny of a caste-based social system and a rapacious administration destroyed economic incentives and inhibited mobility. The resultant picture is one of a low level of performance for the economy as a whole, and manufactures in particular: there is no question of comparability with the buoyant and technologically advanced economy of Europe in the age of the Renaissance and Reformation.

The evidence necessary for a definitive assessment of such contending views is lacking. Such figures for output as are available refer almost exclusively to the staples of the sea-borne trade and only that part of it which was controlled by the European companies. We have no data on the size of the workforce, productivity and investment. However, the qualitative evidence suggests some tentative answers to the questions implicit in the mutually opposed hypotheses.

The trend in demand for manufactured goods was almost certainly upwards. The population, it is now believed, increased very slowly over time by about 50 per cent in two centuries. The inhibiting influence of a subsistence-oriented rural economy was modified by the existence of a relatively prosperous rural élite, increased production of cash-crops, and the general development of exchange stimulated by the collection of revenue in cash. The 3,200 *qaṣbas* mentioned in the *Ṭabaqāt-i Akbarī* were so many foci of exchange in the heart of the countryside. They are *inter alia* evidence for an extensive rural demand for manufactured goods.

Chronic poverty of the masses was the major constraint on demand in all pre-industrial societies. In seventeenth-century England, a quarter of the population was 'permanently in a state of poverty and underemployment, if not of total unemployment'.[1] No comparable quantitative estimates are possible for Mughal India. It is worth noting, however, that all European travellers – no strangers back home either to the spectacle of poverty or to sharp contrasts between wealth and destitution – comment without exception on the grinding poverty of the Indian masses. It has been suggested that social habits rather than abject poverty partly explain the patterns of consumption, e.g. scanty clothing and the minimal use of furniture and domestic utensils, interpreted by foreign observers as signs of misery. Even if this were true, the net effect on demand would be the same. However, the masses were by no means uniformly poor. Our sources refer specifically to the affluence of regions like Bengal and of particular social groups like the Mogar and Mukkuvan fishermen of Malabar who were 'very rich' and owned large houses, farms and ships.[2] Besides the marketed surplus of local manufacturers, the rural demand covered imported items like salt – of which 10,000 tons were yearly carried from Agra to Bengal[3] – metal utensils, and weapons. In 1632 on his way from Agra to Patna, Mundy came across 'labourers with their guns, swords and bucklers lying by them, whilest they ploughed the ground'.[4] The demand for ornaments, produced in 'incredible' quantities, was by no means confined to the rich. 'All the troops from the Omrah to the man in the

[1] Wilson [547], 231.
[2] Manrique [98], I, 64–6; II, 123; Barbosa [81], II, 64–5.
[3] Jourdain [86], 162.
[4] Mundy [96], II, 90.

ranks', wrote Bernier, 'will wear gilt ornaments: nor will a private soldier refuse them to his wife and children, though the whole family should die of hunger.' Those who found gold ornaments beyond their means used silver, copper, ivory and sea-shell. The poorest went in for bell-metal and tin.[1]

In pre-modern societies, the basic demand for consumer goods centre around the three necessities for food, clothing and shelter. We know that a variety of manufactured foodstuffs – oil, butter, *ghī*, salt and sugar – were among the staples of the inter-regional trade. Of these, *ghī* was definitely a part of the daily diet of the urban poor in northern India and cooked food and sweets were in demand in all urban markets. In describing Agra, Manrique mentions 'dainties of all sorts...in the numerous bazars' and 'entire streets...wholly occupied by skilled sweetmeat makers'. Lahore's 'brilliantly lighted bazars' had 'a great number of occupied tents, or...cook-shops' exhaling 'the aroma of the spicy dishes' and displaying 'large spits bearing the flesh of winged creatures'. 'Nor did these bazars lack the simple food of the native' Hindu to meet whose taste 'many tents held different dishes made of rice, herbs and vegetables', besides the ubiquitous flat bread.[2] Neither the prices nor the social habits of the period suggest that these delicacies were for the affluent only. The same appears to have been true of the popular intoxicant, *arak* (*'araq*) made from rice, molasses, *mahuā* or toddy.[3]

As to clothing, even if one were to assume that the entire rural population was clad in the produce of their own villages distributed on a customary basis and the simple loincloth was the only dress of the masses, the sheer volume of market demand represented by the urban poor would have been enormous. In fact, the soldiers and retainers were elaborately attired in public. In Mughal miniatures the urban artisanate is almost invariably shown as clad in simple tailored clothes and, not infrequently, wearing some headdress and footwear. In the Vijayanagara kingdom, Barbosa informs us, the man in the street wore 'short white shirts' of cotton or more expensive material, small turbans or caps, and rough shoes. In short, the urban demand for cloth, tailored and otherwise, and other items of dress was substantial. The existence of a rural market for manufactured goods and relatively affluent rural classes suggests a comparable volume of demand in the countryside, even if the poorer sections of the agrarian society had their requirements met from subsistence-orientated production. The mass demand was indeed very meagre for two groups of commodities: those required for the production of housing and domestic utensils. The great majority lived in houses made of mud, thatching or bamboo while a few

[1] Mundy [96], 223–4.
[2] Manrique [98], II, 156, 187–9.
[3] Ovington [108], 142; Mundy [96], II, 97–8.

earthenware pots, scanty bed-clothes and a flimsy bedstead or two exhausted the list of household goods.

'...There is no middle state in India,' Bernier stated categorically, and Moreland accepted this view without noting the French doctor's qualifying remark 'I cannot deny, however, that I continually meet with persons neat and elegant in their dress, finely formed, well-mounted and properly attended.'[1] Recent research suggests that whatever its relative position, in absolute terms there was a sizeable middle-income group – lower ranks of the bureaucracy, professionals, holders of rent-free tenures, etc. – who constituted a proportionately large market for comfort and luxury goods. The thirty-six Śūdra castes of Jaunpur mentioned in the autobiographical *Ardhakathānaka*, the more extensive list of sixty-six in Abdu'r Raḥīm Khān-Khānān's *Nagara-śobhā* and Pelsaert's reference to a hundred crafts cover artisans and service occupations whose clientele evidently included the middle classes. The lists cover a wide and varied range of occupations – weaver, tailor, barber, metalworker, carpenter, mason, glassblower, stone-cutter, oil-presser, sweetmeat-seller, palanquin-bearer, painter, carpet-maker, paper manufacturer, thatcher, lace-worker, fireworks-maker, sword-sharpener, seller of torches and leaves used as platters etc.[2] The *amīrs*' rapacity as well as the alleged *baniyā* ethic did have an inhibiting influence on the consumption pattern of the traders and professional groups. Tavernier speaks of the 'extreme parsimony of shroffs...and of all Indians in general' and describes how the *baniyās* 'accustom their children at an early age to shun slothfulness' and learn the arts of acquiring wealth. The *baniyās*, Ovington remarked, 'will fly at the securing of a Pice, tho' they can command whole Lacks of Roupies'. Fryer writes of 'the innate thrift of the Gentiles', Bernier of the Hindu belief 'that the money concealed during life will prove beneficial to them after death'. In the houses of some of the Agra merchants Manrique 'saw such vast sums of money piled up, that if they had been covered over they could have struck the ordinary gazer as being merely heaps of grain', a fact not reflected in their standard of living in any marked way. Some observers noticed a difference in the standards of consumption as between affluent Muslims and their Hindu counterparts. The former's could emulate the grandees' life-style because – it has been suggested – they were relatively free from extortion. The causes were probably more complex and evidently had much to do with the social habits of the community.[3]

The housing needs of the rich traders and the middle-income groups

[1] Bernier [102]: letter to M. de la Vaye 252, 282.
[2] Jain [169], I, 53, text, f. 4; Singh [510], 352–67.
[3] Ovington [108], 165, 194; Tavernier [104], II, 143–4; Fryer [107], I, 283; Manrique [98], II, 156; Barbosa [81], II, 74; Fryer [107], I, 112–13.

did represent a considerable market demand for the relevant skills and material, though here again the pattern was not uniform. 'Your swyne lye better than any man', Sir Thomas Roe wrote contemptuously of the great commercial emporium of Burhanpur, 'all built of mudd baser than any cottage.' But Lahore, Benares, Cambay, Sironj – cities inhabited by large groups of traders and artisans – had multi-storied houses of stone and brick. Chanderi in Malwa had 14,000 stone houses. In Agra the lofty stone houses of the Hindu merchants had 'the appearance of old castles buried in forests'. In Delhi, the richer merchants lived like the nobles in imposing buildings within large enclosures. The rich in Surat built expensively with 'brick, lime and a great deal of timber brought from Daman by sea' and decorated the upper storeys with 'works of carving in relief on teak embellished with enamel and lacquer of variegated lines'. The lower orders of the bureaucracy in Delhi had dwellings with 'a tolerable appearance which were 'airy and pleasant', Bernier grudgingly concedes, not forgetting to add that these were seldom made entirely of stone and brick. But in Bengal houses made of bamboo, Abū'l Faẓl informs us, could cost up to Rs. 5,000. Similarly, housing in Kashmir created a demand for timber brought from the mountains down the small rivers.[1] The furniture and utensils even in well-to-do homes were limited in variety. Quilts, mats, carpets, pillows covered with silk brocade, rather than furniture made of wood or other material, were mainly in demand, though bedsteads decorated with brass plates, jugs and metal pots, mirrors etc. also had functional as well as decorative uses. The celebrated Kashmir ware – bedsteads, trunks, boxes, ink-stands, etc. – were in demand in every part of India. In Muslim homes in Bengal, benches, tools and even paltry chairs – for European visitors – were not unknown. The means of transport, as is often the case, were the more conspicuous objects of display. We read of palanquins and bullock carts 'curved, gilded and covered with silk or other expensive cloth'. In matters of dress, quality rather than variety seems to have distinguished the life-style of the rich from that of the poor. There were exceptions to this pattern. The Hindu traders at Agra – we learn from Thevenot – went in for a fair degree of ostentation, using Kashmir shawls and shoes covered with silk-embroidered velvet. Elaborate tailored cloth and silk and brocade for men's dress are mentioned in our sources mainly in connection with Muslims, though the same types of dress were in vogue as 'formal' wear among well-to-do Hindus as well. Gold

[1] Roe [87], 80, 69–70; Tavernier [104], I, 46; Bernier [102], 246, 284–5, 384, 298; Manucci [110], II, 186; Manrique [98], II, 147; Thevenot [103], 17–18, 22–3; Abū'l Faẓl [123], II, 207; G. M. Moraes, 'Surat in 1663 as described by Manoel Godinho', *Proceedings of the Indian Historical Record Commission*, 1950, 182; Abū'l Faẓl [123], II, 134.

ornaments and jewellery were used in profusion by both men and women.

In Indian languages, adjectives derived from the word 'Mughal' connote the ultimate in luxury and display and this hyperbolic assumption is probably not wide of the mark. The Mughal revenue demand is estimated at 50 per cent or more of the gross produce of the land. Of this, in 1647, 61.5 per cent went to 445 *manṣabdārs* and about a quarter of that amount was effectively their personal income. To convert seventeenth-century cash incomes into modern equivalents is not a very useful exercise. However, Moreland estimated that the purchasing power of the rupee in the early 1600s was about five to six times that of its 1914 counterpart; it would be at least twice those figures compared to the 1970s prices. The monthly personal income of a *manṣabdār* under Akbar commanding 500, 1,000 and 5,000 horses is estimated at a minimum of Rs. 1,000, Rs. 5,000 and Rs. 18,000 respectively and roughly twelve times those figures at today's prices. Part of these vast incomes went into hoarding. The bulk provided a market for luxuries and services of retainers. Even allowing for the consumption of a certain quantity of imported items, the nobles' lavish life-style implied a very large demand for domestic manufactures. Bernier, Pelsaert and other European observers suggest that the grandees freely exploited the artisan, paying him 'half his wages or nothing at all'. That 'the cudgel and the whip' – the 'long and terrible *korrah*' which hung at every *amīr*'s door – were freely used to coerce artisans is not in doubt. But the *korrah* and the cudgel cannot explain the fact that unimportant places like Lahore and Agra blossomed into vast commercial emporia, attracting goods, traders and artisans, once they were established as Mughal centres. 'You cannott desire any thinge butt you shall find itt in this citty,' Jourdain wrote of Agra. Manucci described Delhi as a place 'where everything finds a sale and are consumed'. The road from Agra to Fatehpur Sikri was like one continuous market-place. No pressure was needed to induce supplies to follow an army on march. 'Indeed everything..., almost the same as in the capital' could be procured in the royal bazar accompanying the camp.[1]

The imperial household set the pace in conspicuous consumption which all the grandees sought to emulate. Bernier, used to Parisian high life, described 'the consumption of fine cloths of gold, and brocades, silks, embroideries, pearls, musk, amber and sweet essences' in the Mughal harem as 'greater than can be conceived'. The luxury of the nobles, De Laet concluded, could scarcely be described. Palatial buildings – or, luxurious camps made of fine material and appropriately

[1] Pelsaert [92], 60; Bernier [102], 213–14, 228–9, 366; Manucci [110], II, 424; Jourdain [86], 163; Fitch [84], 17–18.

furnished – fine cloths, jewellery, decorations of velvet and brocade for the palaces as much as for the camps, carpets, bedstead, mirrors, gold and silver service, perfumes, 'a great deal of wine', equipment for horses and elephants including picket chains of beaten gold, magnificently decorated palanquins, weapons (which were often works of art, wrought with jewels and precious metals) – such were the major items on which royalty and the grandees expended their lavish income. Our sources give us some insight into the volume of such demand. A thousand suits were made up for Akbar every year. Abū'l Faẓl had his entire wardrobe replaced annually, all the 'old clothes' being distributed among his servants. De Laet estimated the daily outlay at Agra at Rs. 50,000 for the emperor's food and clothing and the cost of feeding the elephants etc. and another Rs. 30,000 for the harem. Moreland suggested that 'with the possible exception of jewellery, more money was spent on the stables than in any other branch of a courtier's household'. One courtier with sensitive nostrils had his horses rubbed with otto of roses. As to the scale of demand on this score, Shāhjahān kept at Delhi and Agra 200,000 to 300,000 horses, 8,000 to 9,000 elephants, besides a large number of baggage horses and mules. A courtier of Manucci's acquaintance spent Rs. 250,000 a year on his menagerie. The number of slaves and servants in the employ of the nobility was truly staggering. Each noble had three or four wives, and each wife had her own slaves, '10, or 20, or 100 according to her fortune'. A noble's standard requirement, as indicated by Abū'l Faẓl, included four men for each elephant, two or three per horse, a crowd in the kitchen, two crowds of tent-pitchers, etc. A large retinue always accompanied the nobles whenever they went outdoors 'not only to clear the way, but to flap the flies and brush off the dust with tails of peacocks; to carry the pioquedant and spittoon...'.[1]

The line of demarcation between private and public demand is, of course, obscure in all pre-modern societies. The Mughal forts were as much the residences of the royalty as constructions essential for defence and day-to-day administration. The important fact about the expenditure incurred by the imperial government and its functionaries is that it created an enormous demand for construction work, road-building, arms, equipment for horses and elephants, camp equipment and means of transport like palanquins, carts, boats, etc. The Mughals spent freely on the construction of the chief cities and the nobles embellished Delhi at their own expense to gain the monarch's favour. Charitable expenditure by the rich went into the construction of caravanserais, mosques, almshouses and, less often, hospitals. The Surat Parsi merchant, Rustam Mānek, 'benevolent and charitable like

[1] Bernier [102], 221–2; De Laet [93], 110–11; Manucci [110], II, 351.

Hātim' maintained roads and constructed bridges, wells, reservoirs for cattle and a great building to be used by Parsis for ritual purposes.[1] Shāhjahān's building activities and the size of the army under Aurangzeb suggest an upward trend in the 'public' demand for goods and services. Where the required commodities were produced in the imperial *kārkhānas* the relevant market demand was for wage-labour rather than manufactured goods.

All available evidence suggests that the inter-regional flow of commodities both by land and along the coast increased substantially during the Mughal period and this meant a corresponding expansion in the demand for manufactured goods. Mughal peace and increased urbanization contributed to the process. Of particular interest in this respect was the widened market for intermediary products like yarn, gold thread, raw silk, metalwork for ships and packing materials like jute sacking and cordage. Among the staples of the coastal trade were food products like butter, oil and sugar. As discussed elsewhere in this volume, the overseas demand for textiles, sugar and diamonds had a markedly upward trend while the markets reached by the overland routes – Persia, Turkey, Muscovy, Poland, Egypt, Arabia, etc. imported quantities of muslin and other luxury items – at least did not suffer any diminution. The expanding coastal and overseas trade created a corresponding demand for shipping. When the European companies also began to procure ships in India, this demand reached a new peak.

In short, the demand, both private and 'public', for manufactured goods in Mughal India was large, varied and expanding. The grossly inequitable distribution of income both inhibited and stimulated this demand. In any case, whatever the problems of India's manufactures in this period a small or stagnant market was not one of these. The inland market for a range of basic consumer goods – cheaper textiles, manufactured foodstuffs, salt, some metalware and building materials – was large in absolute terms and expanding. This was particularly true of textiles, a demand further stimulated when the European companies began to export in bulk coarse fabrics like the Negro cloth. The vast internal market for luxuries, heavily dependent on the *amīrs*' spending capacity, presumably followed the trends in the imperial finances. Again, the foreign demand for the finer as well as medium-quality textiles expands throughout our period and it is not clear how far the political disturbances of the eighteenth century affected the domestic demand for these products.

Foreign observers like Bernier who lament the destructive results of the nobles' rapacity for India's manufactures, also note with wonder the variety, excellence and profusion of the country's manufacturing

[1] Kaiqubād [165], IV, 130.

output. This positive assessment, in Moreland's view, was a result of malobservation: the travellers were apparently misled by the concentration of manufacturers in a few towns and cities along the major highways of trade which they followed, unaware of the bleak prospects in the greater part of the territory. He cites as evidence the low purchasing power of the masses and the silence of our sources regarding the manufacturing scene in extensive parts of the country. The nature and level of market demand discussed above suggest that despite the poverty of the masses the aggregate demand was large and expanding. With regard to cotton textiles, Moreland himself conceded that not only was the country as a whole self-sufficient, but 'all towns and most large villages produced the bulk of the cloth worn in the locality' and 'that the aggregate production was one of the great facts of the industrial world' of that time. This widespread distribution of manufactures catering to local needs appears to have been equally true of manufactured foodstuffs, construction work, means of transport and leather goods but, to a lesser extent, of minerals and metalware. Travellers who did stray from the familiar trade routes confirm the truth of this statement. In describing towns, real or ficititious, the literature of the period always mentions the full complement of manufacturing castes. That this was not simply a literary convention is proved by the early British accounts such as Buchanan and Hamilton's and the early gazetteers. There is no reason to suppose that the traditional manufactures described in these later sources were post-Mughal developments. Concentration of particular manufactures in a region or a few centres of production was really the characteristic of 'export goods' (for both the inland and the foreign markets) and certain luxury products, besides minerals and such agro-manufactures as were necessarily localized. Even such centres of specialized production were widely scattered across the length and breadth of the country though they were especially plentiful wherever the access to markets was easy, i.e. along the trade routes and near the ports. Thus the weight of evidence is overwhelmingly against the view that the industrial map of Mughal India was marked by a few oases of manufacturing centres hugging the trunk routes amidst an economic desert of subsistence agriculture.

The country's leading manufacture, cotton textiles, was produced probably in every part of the country both for local consumption and distant markets. The bewildering variety of cotton fabrics mentioned in the contemporary sources – 150 names occur in the first ten years of the English factory records – can be divided into a number of overlapping categories according to the criteria of classification used. They were produced as piece-goods or ready-made clothing (which involved little tailoring); calico, a stout cloth, or muslin (which was thinner);

plain (i.e. unbleached), bleached and dyed or patterned, the patterns being produced on the loom with coloured yarns but more commonly printed with a wooden block or painted with a pen or stile. Quality was judged by the fineness of the yarn and the number of threads to the inch and, in the case of the patterned varieties, by the less palpable criteria of artistic excellence. The average piece of calico, known as *dutti* or *bāfta* in Gujarat, was 12 to 15 yards by less than three-quarters of a yard, though the wider broad *bāfta* was also produced as well as the longcloth sold by the length. There is no simple key to the bewildering variety of names for the different types of textiles. Some were named after their place of origin, e.g., *darīābādī*, *khairābādī* etc., others distinguished according to size, quality and colour patterns, e.g. the east coast varieties of 'percalles' (*parkālas*), 'moorees' (*muhrīs*) and 'salempores'. A clear gradation of the different varieties was recognized. While most varieties were produced in most places, longcloth came mainly from northern Coromandel and northern India, muslin from Deccan and Bengal (the finest from the district of Dacca), the best painted cloth from southern Coromandel and fabrics of mixed cotton and silk from Gujarat. Individual towns and cities like Patna, Benares, Lahore, Multan or Allahabad and particular regions, e.g. 'Chabaspur and Sonargaon with the surrounding villages and indeed as far as Jagannath', to quote Pelsaert,[1] were reputed for particular varieties or prolific output. The export varieties came mainly from four regions, the Indus Plain including Punjab and Sind, Gujarat and the west coast as far south as Dabul, the Coromandel Coast, both south and north, and Bengal. The export from the west coast, however, included items from north Indian centres of production as well. The demand in the traditional Asian markets was conservative and highly specialized and the supply of each item came from particular centres of production. The *tapi* or skirt, turbans, sashes, handkerchiefs and a wide range of 'fancy goods' were regularly exported to the south-east, west Asian and African markets. Guinea or Negro cloth – probably longcloth in stripes or checks first exported by the Portuguese for African slaves in West Africa and Brazil – also figured prominently in the inventories of the European companies.

Besides fabric and items of dress, the range of cotton textile products included the Coromandel sailcloth, cotton carpets, bed-covers, pillow-cases, handkerchiefs, mattresses from Sind, embroidered quilts from Bengal, bed-hangings, tents etc.[2] The last was a very important item used extensively by royalty and the nobility for residential purposes and during campaigns. Though precious materials like silk or velvet were used for decorative purposes, the basic material used for tents was

[1] Pelsaert [92], 8.

[2] Manrique [98], I, 33–4; II, 239; Tavernier [104], II, 4.

certainly cotton textile, including canvas. Of the eleven types of tents mentioned by Abū'l Faẓl, the 'plain', that is presumably cotton, *barga* could cost '10,000 rupees and upwards'.[1]

The production of cotton yarn appears to have been always an independent manufacturing activity and a second occupation in weavers' families. Yarn was also produced by a subsistence-oriented system in peasant households. The weavers producing for the market are found invariably procuring yarn spun by independent spinners. Broach, Balasore, Kasimbazar, etc. are mentioned as major sources of yarn supply. The English Company exported yarn from Gujarat, Burhanpur and Bengal. These exports were of the relatively coarse varieties, because artisans in Europe could not use the finer quality. The finest yarn, used for the Bengal muslin, we learn from later sources, was produced by a highly specialized group of spinners in the Dacca district. There are reasons to believe that the output of yarn, especially in Gujarat, increased during the seventeenth century. For one thing, the resistance to the purchase of yarn encountered by the English in the 1630s was no longer there in the later decades. Import of yarn from Surat to Bengal steadily increased between 1680 and 1710 reaching a peak figure of over 14,000 maunds in 1701–2 and the price declined by some 30 per cent over a sixty-year period.[2]

It seems reasonably certain that production and export of silk, especially from Bengal, increased substantially in the course of the seventeenth century. Earlier, besides Gujarat, which remained the main area producing finished silk, a small quantity was produced in Kashmir and Bengal (including the eastern district of Bakla),[3] besides a few cities like Agra, Lahore, Fatehpur and probably Patna and Thattah, mentioned by Manucci and Manrique respectively as centres of silk production. Abū'l Faẓl mentions Akbar's special interest in the production of silk and his successful encouragement of foreign artisans for the improvement of silk-weaving. Gujarat initially was heavily dependent on Chinese raw material, for sericulture was never developed in this region. In the latter half of the seventeenth century, Bengal had completely ousted China as the source of supply, Kasimbazar alone producing some 2.3 million lb. of raw silk, about two-thirds of which went to Gujarat and a third 'remained with the people of the country for the manufacture of their own stuffs'.[4] In this period, the Dutch found a market for Indian silk in Japan, and the English began to export Bengal raw silk to Europe. The finished products included carpets and velvet pavilions, satins and taffetas with bands of gold and silver, *patolās* decorated with multi-coloured patterns, etc. Indian silk included the famous herb-cloth,

[1] Abū'l Faẓl [123], I, 21, II, 55–7.
[2] Chaudhuri [269], 173.
[3] Fitch [84] (*Early Travels in India*), 28.
[4] Tavernier [104], II, 2.

now known to be *tasar* and the Assam wild silk (almost certainly *mugā*) mentioned by Tavernier.

Our sources are relatively silent about another important category of textile products, namely, wool. Abū'l Faẓl included woollen blankets in his list of commodity prices. All other available references are to shawls and carpets. Bernier mentions shawls as the most important manufacture of Kashmir which gave 'occupation even to the little children' and were made of local wool as well as goat hair from Tibet.[1] Attempts to manufacture similar shawls at Patna, Agra and Lahore were not successful. Akbar's attempts to produce Persian-type carpets in his own *kārkhānas* were, according to Abū'l Faẓl, more successful, and this gave a fillip to the manufacture of carpets in several cities of the empire. As far south as in the Andhra country, fine carpets were produced by 'a race of Persians'.[2]

Other textile products of the period included *sann*-hemp – found in all Mughal provinces – and cordage from coir (also used to produce a 'silk-like' stuff)[3] to meet the requirements of local shipping in particular. Ropes for packing silk-bales had become a specialized manufacture at a Kasimbazar suburb in response to the requirements of the local industry.[4] On packing material generally the available information is scanty. Tavernier mentions a sort of matting called *toti* used for wrapping merchandise which he saw at Vengurla. Moreland's belief that the poor in Bengal were clad in jute cloth is now known to be based on 'a misrendering of the word *tāṭband* used in the *A'īn*' which referred to eri-silk, not jute. In fact, the earliest available references to jute cloth is in the reign of 'Alīvardī.[5] A significant development in textile manufacture in India was the emergence of particular processes as virtually independent manufacturing activities: bleaching, dyeing, printing and painting of cloth as well as silk-reeling developed in several places as flourishing manufactures on a scale which was probably without precedent before the seventeenth century.

Even any remotely dependable estimate of output and trends in India's most important manufacture is not possible. Stray items of information, like the number of weavers' families at Thattah or silk production at Kasimbazar, hint at the vast absolute magnitudes involved. Moreland's fanciful estimate, a part of his exercise showing that the per capita national income of India had probably increased under the British – carries one nowhere. It seems reasonably certain, however, that the total output of textiles increased under the Mughals. The emergence of new centres of production, significant expansion in

[1] Bernier [102], 402–3.
[2] Master [32], II, 171.
[3] Varthema [80], 165.
[4] Master [32], II, 298.
[5] Habib [353]; Datta [280], 230.

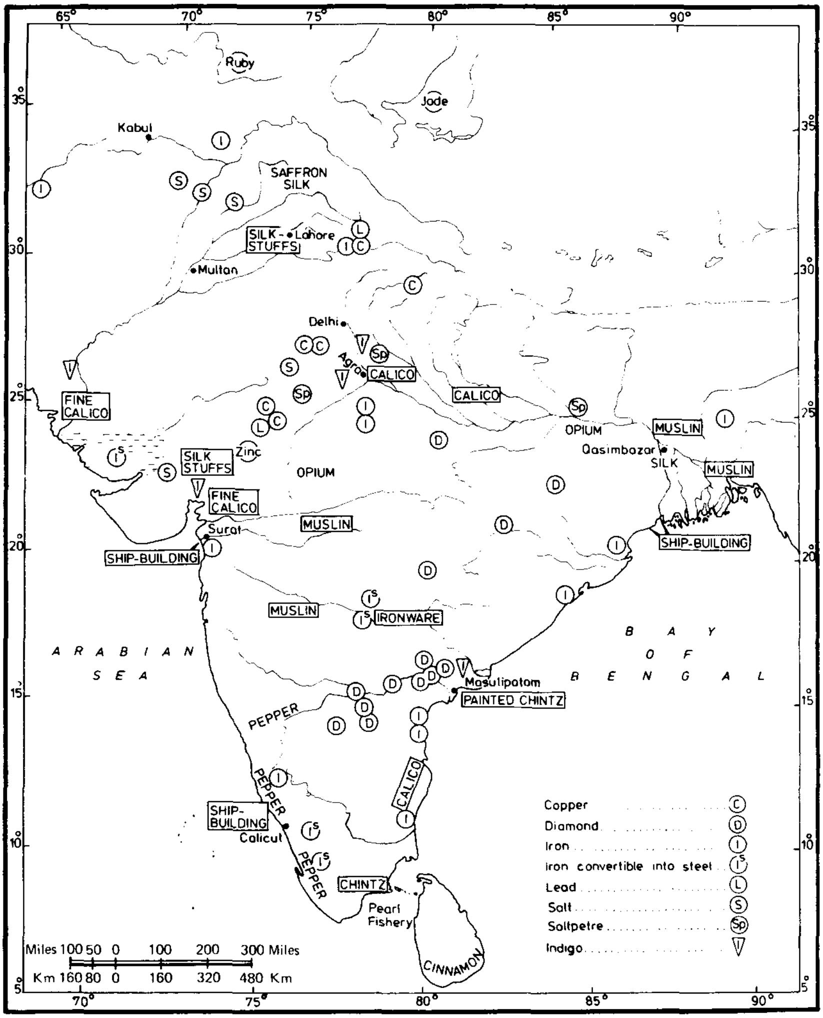
the long-distance trade, organizational changes likely to induce increased productivity, all point in the same direction. Another significant shift was in the relative importance of the areas catering to the export market. While Gujarat remained the major centre for silk production, it apparently lost to the east coast and Bengal its primacy in the export of cotton fabrics to Europe ever since the devastating famine of the 1630s. Marhatta depredations and the loss of the Persian Gulf markets owing to political disturbances in the area set a seal on the region's decline in the first half of the eighteenth century. The one other major fact in India's textile history during this period was the emergence of Bengal as a major centre of silk production.

Next in economic importance to the country's textiles was the group of products closely linked to agriculture. Among these, the items which feature prominently in the commercial records are the dyestuffs and sugar. Of the two main dye-stuffs, chay producing the red dye came mainly from two places on the Coromandel Coast. The more important indigo was more extensively produced, the main centres of production being located in the Agra area, especially Bayana, Sarkhej in Gujarat and several places in north and south Coromandel. Other centres included Hindaun in Jaipur State, Bulandshahr, Burhanpur and Aravad in east Khandesh.[1] Bayana indigo was considered the best and accordingly fetched a higher price than its nearest rival, the Sarkhej variety. The dye-stuff was usually produced by the peasants themselves, but at least in Gujarat one comes across instances where they sold the leaves to others who specialized in the production of the dye.[2] The bulk of the indigo produced was used locally, but a substantial export to Europe developed, the English concentrating on supplies from Gujarat and the Agra region, the Dutch tapping the Coromandel sources as well. The history of indigo highlights the price-responsive character of India's agro-manufactures: after the 1630s famine, its output declined because foodgrains fetched higher prices and also because the producers of non-foodgrain crops had been among the first casualties. The evidence relating to Coromandel also suggests that whenever there was a decline in demand, the producers of such crops quickly shifted to subsistence agriculture.

Cane sugar in all its three forms – the coarse jaggery, the fine-grained white 'powder sugar' and the expensive 'candy' or large crystals – were produced in many parts of the country, though the best and the cheapest varieties came from Bengal. Agra and its neighbourhood, Multan and Orissa were among the other areas producing sugar. The fact that Bengal sugar found new markets in Europe and Persia through the activities of the English and the Dutch suggests a possible increase in

[1] Tavernier [104], II, f. 7.

[2] Foster [31] (1655–60), 76.



Map 8 Minerals, manufactures and other commercial products, seventeenth century

output. The annual Dutch shipment to Persia in the 1640s averaged 400,000 lb. to 450,000 lb. The English interest in the commodity was, however, short-lived.

The other agro-manufactures which were important as articles of domestic consumption and occasionally figured in the inter-regional trade, included oils, tobacco, opium, saffron and alcoholic drinks. The Orissa Coast derived its name from the oil-seed 'gingelly' found in

abundance in that area. Medinipur (Midnapore) in Bengal manufactured 'valuable odoriferous oils from flowers and other scented substances' which were 'exported to all parts', while Gwalior was famous for its Chambeli oil. Tobacco, the one important new commercial crop which became established in course of the seventeenth century was first brought by the Portuguese in Akbar's reign. The daily *sā'ir* duty on the commodity at Delhi, according to Manucci, came to Rs. 5,000 in his time when it was already an export product in Gujarat, Bengal and Coromandel. Near Masulipatam Bowrey found even three- to four-year-old children smoking tobacco. Opium was an established manufacture in Malwa and Bihar, as was the production of alcoholic drinks from toddy sap, *mahuwā* and molasses in many parts of India.

Closely related to the agro-manufactures in their economic character were the forest products which had to be collected and then put through a certain amount of processing. These included gum-lac, found in abundance in Assam, Bengal and Gujarat, beeswax and animal products like musk and rhinoceros horn.

One of the weakest areas of India's economy was her production of minerals. Moreland suggested that this weakness was largely the result of inadequate juxtaposition of minerals and fuel resources. A technological limitation – unfamiliarity with techniques of deep mining – may have been a further contributory factor. However, India was self-sufficient in iron, not an insignificant fact, considering the very substantial demand for weapons. The metal was produced in the Mughal provinces of Bengal, Allahabad, Agra, Berar, Gujarat, Delhi and Kashmir. In the 1660s, the Dutch began to export iron products from Coromandel to Batavia. The volume of output is indicated by the fact that in 1667 the exports were 105,000 lb. of nails, 188,000 lb. of cannon balls, 189,000 lb. of iron bars and 10,000 lb. of iron bands. The exports also included steel, as much as 10,109 lb. in 1657. As to other mineral products, saltpetre – used for both the manufacture of gunpowder and, rather bathetically, cooling water for the affluent, acquired a new importance as an item of export, first from Gujarat and later from Coromandel and 'Bengal', i.e. the Patna area, as well. The exports from Gujarat actually came from the Ajmer area. The total output in the Patna area around 1688 came to 226,200 maunds raw and 127,238 maunds when refined.[1] The Patna saltpetre was considered the best for the manufacture of gunpowder, a commodity produced in the imperial *kārkhānas* as well as the European factories.

One product which excited the imagination of all foreign observers was diamond, though its importance to the country's economy was probably not very great. As a form of enterprise, it was of interest in

[1] Chaudhuri [269], 161.

attracting the largest number of workers on a wage basis to an area of operation. The main mines were confined to two fields in Bijapur and Golconda respectively. A small quantity was also collected from a river-bed in Chotanagpur. A less spectacular but more important product was salt – a major staple of the internal trade – quarried mainly from the Punjab hills and the Sambhar lake, besides being produced from seawater in many parts of the country. Very small quantities of gold, silver and cheaper metals – of no economic significance – and probably a somewhat larger quantity of copper, were also mined, the latter in Rajputana and the submontane regions of the Himalayas.

Production of the means of transport was one of the most significant areas of Indian manufacture, both in terms of the quantity of output and the value of the product. The chief man-made means of internal transport, both by land and water, have been discussed elsewhere in this volume. Perhaps the most striking feature of this line of manufacture in the Mughal period was the number and variety of boats. If, however, one can speak of a growth sector in India's manufactures in this period, the description probably fits the developments in the shipping industry. Down to the earlier half of the seventeenth century India produced all her shipping required for coastal as well as the Indian ocean trade. These were mostly of the 'junk' type, often very large by the standards of the time – the largest being the passenger ships carrying pilgrims to Mecca – but of rather deficient manoeuvrability. The centres of production, partly dependent on the availability of timber, were spread along the Gujarat, Konkan and Coromandel coasts. European-type ships were manufactured in the Portuguese territory as a monopoly and English attempts to procure from this source were frustrated by the exorbitant prices asked. It was in response to this demand of the European companies and then by Indian shipowners that the production of European-type ships began, first at Surat, later at Bombay. For a brief period (1652–61), the Dutch undertook a similar experiment on the Coromandel Coast, but the costs were considered uneconomic by the authorities at home.

The traditional consumption pattern of the affluent created a demand for a wide range of comfort goods – household utensils, furniture, leather goods, tailored cloth, writing material, jewellery, perfumes, harness and saddlery, etc. – the products of a correspondingly varied group of manufactures. Many sections of the *Ā'īn* are devoted to a detailed account of these products as consumed by the imperial households. Of the items so listed, only a fraction came from the imperial *kārkhānas*. The rest were produced by independent artisans, often in remote parts of the empire. Kashmir and Gujarat were famous for their woodwork, the latter producing lacquerwork of rare durability.

Lahore was renowned for her boots and shoes, harness and saddlery, Multan for leatherwork. Perfumes in which the Mughal nobility delighted came from far-flung parts of the empire, Patna contributing the oddest item – perfumed pottery. Shahzadpur near Allahabad exported paper 'to other parts'.[1] The long lists of items of dress, harness for different animals in the royal stable and the great variety of weapons read with the known facts regarding the extreme tendency towards specialization in manufactures, suggest that the number of separate manufacturing activities in the Mughal period were probably many more than Pelsaert's 'hundred trades'. Since the nobility and often the affluent trader sought to emulate the life-style projected in the *Ā'īn*, the output of such manufactures was unlikely to have been small. In other words, the qualitative evidence suggests that Mughal India had a manufacturing sector marked by great variety and vigour and probably a large volume of aggregate output. Whether it had developed tendencies likely to lead to positive long-term changes is, however, a very different question.

The interaction of technology, the social system and the size and character of the market resulted in a limited variety of manufacturing organization in Mughal India. Any significant range of scales or hierarchy of organization producing different types of goods or catering to different markets were also by and large absent. The relatively elementary character of technology with its emphasis on cheap uncomplicated instruments and very low ratio of fixed to working capital implied a minimal concentration of labour and capital in individual units of production. Since the bulk of production was for the isolated small-scale rural markets and even there geared more to reciprocal arrangements rather than to exchange, small units using very little capital were the characteristic form of organization. The social system developed through centuries-long evolution, which included the traditional matrix for all economic activity, placed all producers of goods broadly on the same rung of the ladder – with a further hierarchical subdivision of occupations in terms of their relative ritual cleanliness – and then divided them horizontally into so many hereditary occupations. Where heredity is the chief if not the only determinant of an artisan's choice of trade, the family develops naturally as the work-unit and the *paterfamilias* as the master craftsman providing the necessary training in skills. The resulting uniformity of family-based production units was modified by the nature of demand and at times by the types of commodities produced. Neither the Mughal monuments nor the seagoing vessels could be produced in the artisan's back-yards. Still the social system severely regulated the impact of market forces. The

[1] Mundy [96], II, 98.

differences in remuneration as between the unskilled and the highly-skilled producer were narrow enough to preclude the emergence of an élite artisanate. The highly specialized demand, especially for luxury goods, was catered for through a continuous proliferation of artisan castes each attending to increasingly minute processes or the production of an increasingly narrow range of goods. As we have already noted, 'Abdu'r Raḥīm Khān-Khānān mentioned sixty-six castes in his list of urban artisan and service groups, the *Ardha-Kathānaka* the traditional thirty-six, while Pelsaert gave the round figure of a hundred to indicate the range of specialization.[1] Particular varieties of textiles came to be produced by particular sub-castes. Virtually every operation connected with the production of cloth – cotton-carding, spinning, winding silk-thread, unwinding and rewinding the yarn, formation of the cloth on the loom, bleaching, dyeing, printing and painting of designs – developed into distinct occupations, some as exclusive *jātis* or caste categories. To take a very different example, the mining and working of cornelian in Gujarat was divided into thirteen different operations performed by distinct groups.[2]

The social system restricted the scope of organizational diversity in other ways as well. It was virtually impossible for an artisan to aspire to a higher social status and, one imagines, like the untouchable who accepted his untouchability as part of a God-given order, the manufacturer accepted his economic as well as his social situation as unalterable facts. The artisan-entrepreneur is an unlikely, and at best, a very exceptional product of such a society. A highly arbitrary ruling class confirmed and compounded the manufacturer's low social status. Caste also tended to limit the range of social groups involved in manufacture. While given the opportunity no one was above making the extra *ṭanka* in trade, with the exception of caste Hindu women producing yarn, no high-caste person is known to have gone in for manufacturing activity directly or indirectly. The patrician draper or the bishop owning an iron foundry – not exceptional features of the European scene by this time – could have no Indian counterpart. Work units producing for the market controlled or owned by members of the élite with their potentialities for innovation were thus precluded.

Manufacturing in Mughal India was predominantly a rural activity though most urban centres also had their artisan industries, especially production of certain luxury and semi-luxury goods. Only, any exclusive concentration of secondary production in towns and cities with the countryside supplying the raw material – characteristic of mediaeval Europe – was not to be found. In country as in town, the artisan's family

[1] Jain [169], (text), 22, 26, (trans.), 1, 53; Singh [510], 352–67; Pelsaert [92], 60.

[2] *Bombay Gazetteer* [254], VI, 199.

was the basic unit of production. Early nineteenth-century sources describing the traditional organization for the manufacture of textiles mentions a division of labour between men and women, while Fryer and Olafsson refer to the painter's children and family helping with the production of the famous Coromandel painted cloth in the seventeenth century.[1] If the family was the work unit, the artisan's home was the typical workshop with capital provided from the surplus over the producers' consumption needs.

Though the evidence on the point for our period is scarce, data from the early colonial era indicate quite conclusively that production of manufactured goods by peasants for their own consumption was a long-established tradition in the Indian economy. Mukundarām in seventeenth-century Bengal and Śrīnāth in fifteenth-century Andhra, however, do mention the production of yarn by women in peasant homes.[2] It is also unlikely that the production of cloth by peasants for their own use, as well as the market, observed by Buchanan was an eighteenth-century development. Despite the high degree of occupational specialization on a hereditary basis, a characteristic common to all agrarian societies was not altogether absent in India: the line of demarcation between agricultural and manufacturing activities was not always clear. The peasants' involvement in the manufacture of a range of commodities is discussed below. Similarly, rural artisans as hereditary servants of the village community 'were often enlisted by the peasant for auxiliary agricultural work'.[3]

There is little reason to doubt that the bulk of the rural manufactures in this period, as earlier and later, were produced by the hereditary artisan castes bound to the dominant agricultural castes by traditional ties of the client-patron relationship and collectively maintained, like their fellow service caste-groups. Hereditarily fixed shares of the village produce, supplemented or replaced in some cases by grants of rent-free land or cash payments, constituted their main income. There is plentiful data proving the prevalence of such reciprocal arrangements for the production and distribution of commodities – described in modern anthropological writings on India as the '*jajmānī* system' – in southern and western India in this period as well as earlier and later epochs. The evidence relating to north and eastern India on all aspects of the traditional system relates mostly to the early colonial period. In the latter case too, the references are to such a firmly established arrangement – and one found in such widely dispersed regions of the sub-continent – that it is reasonable to conclude that the so-called '*jajmānī* system' was the characteristic basis for rural manufacturing

[1] Fryer [107], I, 90; Olafsson [100], I, 142.

[2] See: Raychaudhuri [464]; Chicherov [270], 20.

[3] Chicherov [270], 37–8.

organization throughout the sub-continent, though perhaps in some areas (like Maharashtra) it was more clearly articulated than in others (like Bengal). It was a system primarily oriented towards subsistence production and customary distribution of the produce rather than to production for exchange on a cash basis. An important economic rationale for its prevalence and persistence appears to have been the chance it offered for survival during the recurrent famines: those who, like the weavers in the Surat area during the 1630s famine, left the relatively secure shelter of the rural community to produce more gainfully for the market, were among the first to die of starvation whenever food became scarce.

By the seventeenth century, if not much earlier, exchange had made significant inroads into the subsistence-oriented system of manufacture by collectively maintained artisans. Payments in cash and kind for additional work, or entirely on a piece-work basis, co-existed with the more widespread practice of allocating fixed shares of the rural produce and/or land to the artisan families. Here, again, the evidence for regions other than western and southern India is either indirect or relates to a later period. On one point, however, there is no scope for doubt. The rural artisan in Mughal India, whatever the basis of his relationship to the village community, did cater to a large and very probably expanding market. The 3,200 *qaṣbas* mentioned in the *Ṭabaqāt-i Akbarī* are a case in point. The items on sale in the rural markets listed in the Bengali literature of the period include a whole range of commodities evidently produced by the local artisans. It has been suggested that over time there was a differentiation between the rural artisans catering for the market and those tied to the village community. While this may be true of weavers, blacksmiths manufacturing weapons or the manufacturers of means of transport, it is far more likely that groups like oil-pressers, dairymen or potters combined their production for the market with their customary service obligation to the village community. For while we hear of weavers' or blacksmiths' villages, no similar concentrations of other artisan groups (which one might expect in the case of any definite break-away from the traditional organization) are mentioned in the sources. There is nothing to indicate that the traditional system was dissolving through the operation of the market forces. By the mid-eighteenth century, it appears to have been under pressure in some parts of the country, especially Gujarat and Maharashtra, through the forcible seizure or mortgaging of the artisans' rent-free lands by the local power élites.

Production of manufactured goods for the market was not an uncharacteristic activity even for the subsistence farmer. The agro-manufactures like the dyestuffs, indigo and chay, cane sugar and raw

silk were products of peasant households. While the production of silk in its finished form was a highly specialized activity, all the earlier stages in the production process from mulberry cultivation to the winding of cocoons were undertaken by the same peasant castes. The differentiation of each process as a distinct occupation was probably a later development. Salt and saltpetre production also were part-time peasant activities, though these too had specialized castes – *nūniā* and *malangī* – exclusively concerned with their manufacture. Buchanan's account of iron-smelting and charcoal production as part-time peasant activities in late eighteenth-century Bihar also suggests a long-established tradition. In short, despite the dominance of subsistence-oriented production, in rural manufactures as in agriculture, exchange had made deep inroads: both the peasant-manufacturer and the artisan bound to the village community responded to the development of the market.

Very probably by the mid-eighteenth century the entire production for the long- and medium-distance trade was dependent on artisans who were fully weaned from the '*jajmānī* system'. The majority of these artisans appears to have become dependent on the system of advance – of part of the price and raw material – from the buyers or the middlemen. In some cases part of the advance was paid in grain.[1] Describing the situation at Masulipatam, an English factor reported in 1677 that formerly 'the Towne was soe well stored with able merchants, that many ships Ladeings of Divers sorts of Callicoes might [*sic*] and were procurable in the space of two or three dayes', but now 'noe considerable quantity of any sort of Callicoes can be procured without given money out some months before...'. The Surat Council similarly reported in 1664 that without advance of money to weavers, even half the quantity desired would not be procured.[2] The basic *raison d'être* of *dādnī* was no doubt the inadequacy of the artisan's capital for the requirements of an expanded and expanding market. In the case of the European Companies special factors contributed to its development. Weavers, for instance, were hesitant to set their looms in accordance with the Companies' special requirements for fear that they would suffer losses if the companies rejected their products. *Dādnī* gave them the necessary security. It was also a way of binding-up producers in the face of competition from other European companies and Indian merchants.[3] But only in a few cases were the artisans working under the *dādnī* system reduced virtually to the position of wage-earners – with the buyer providing the raw material and paying on a daily basis. The weavers working for the English Company's chief order supplier, Kasi Viranna, on the Coromandel Coast, or the silk-reelers in the Kasimbazar factory,

[1] Master [32], II, 114; [2] Foster [31] (1661–4), 207, 208.
[3] N. K. Sinha, *Economic History of Bengal*, II, 186–7.

were instances in point. *Dādnī* was not equivalent to the putting-out system in so far as the transactions it covered were still sales with the artisan retaining considerable independence. As late as 1790 the weavers supplying the Company's Bengal factories procured their own yarn. Where the raw material was expensive and had to be procured from distant sources, as in the case of the silk manufacture and jewellery in Gujarat (for which the silk came from Bengal and the jewels from Pegu, the Golconda mines etc.), the artisans' dependence on the merchant-buyer was proportionately greater. Yet the system at most promoted the merchants' control over the producer rather than the process of production itself. Apparently, the very high expectations of mercantile profit discouraged the traders from going in for the risks implicit in any involvement in production. Where the producer was effectively bound up to any monopsonistic buyer, this was due more to extra-economic pressures than any economic necessity. The caste system was apparently one parameter of this extra-economic dimension: the merchants' control over the artisan might assume the form of the formers' caste-guild controlling the latters' as, for instance, in the Gujarat agate industry.[1]

Localization of manufactures was another concomitant of market-oriented production. In all likelihood, the increase in both inland and foreign trade stimulated this tendency. In the early years of the seventeenth century, the European Companies procured their 'investments' by shopping around for the required items in the emporia as well as the villages and towns where these were produced; *aurangs*, or specialized centres in the districts where there were concentrations of artisans, appear to have been relatively unimportant as sources of supply. By the mid-eighteenth century, the latter alone supplied their requirements. How large such concentrations were can be gauged from the example of Kasimbazar annually supplying 2.2 million lb. of silk; the three European companies together employed some 1,400 to 1,600 silk-weavers and since their demand accounted for less than two-thirds of the total output, the total number of weavers at Kasimbazar must have been 2,500 or more.[2] Cotton textiles accounted for even larger concentrations. Masulipatam in the 1620s and Benares in the 1640s each had some 7,000 weavers[3] and in the mid-eighteenth century, every major town from Dacca to Surat had very large contingents of these artisans. One expected result of such concentration was that it lowered the price of cloth – in one instance by as much as 50 per cent in twelve to thirteen years.[4] The most important contributory factor in this development was

[1] *Bombay Gazeteer* [254], IV, 106–9.
[2] These estimates are derived from data given in Tavernier [104], II, 3; Bernier [102], 440.
[3] Olafsson [100], 158; Manrique [98], II, 147.
[4] Master [32], II, 10.

the growth of a market. Artisans settled in large numbers in and around the commercial emporia, the centres of export along the coast, the European factory towns like Madras and Calcutta and the urban centres which had a relatively affluent class of consumers. In some instances, availability of the relevant raw material was the determining factor. *Bāftas* were brought from Agra, Lahore and Bengal to Broach and Navsari in Gujarat to be bleached with lemon juice because large quantities of lemon were readily available near these two towns. Similarly, cloth from all over India was taken to Agra and Ahmedabad for dyeing blue and black because of their proximity to areas growing high-quality indigo.[1] In ten villages near the iron-mines in Golconda, there was a concentration of blacksmiths and cannon-ball makers. There were other instances of localization related more to the concentration of the relevant skills and hence more difficult to explain. The highly specialized and market-oriented Gujarat silk industry, concentrated mainly at Surat and Ahmedabad, depended entirely for its yarn and raw silk supply on Bengal, especially Kasimbazar. It is not clear why Gujarat did not develop her own sericulture, or Bengal the production of silk fabrics. The fact that the English Company failed to induce silk-reelers from Bengal to settle in Madras despite the offer of high wages suggests that migrations of skilled workers on any significant scale (despite some instances to the contrary) were subject to certain inhibitions. Characteristically, a major emporium like Hugli or Cambay attracted manufacturers of a wide range of commodities – the former, of silk, sugar, opium, oil, butter, gunny and, of course, cotton cloth; the latter of carpets, quilts, tents, furniture, ivory and cornelian.[2] On the other hand, certain centres were famous for only one or two products, e.g. Srinagar for shawls and woollens, Jaunpur for woollen carpets, Kalpi for sugar candy, Alwar for glass, Lander for oils and perfumes.[3] Specialization in fact was carried much further. As a consultation (dated 17 November 1752) at Fort William, Calcutta reported; 'Fabric of every aurung having its peculiar qualities, will not permit of their being packed in one and the same bale.'

The increased localization and specialization were mainly a quantitative development, the expansion of one familiar feature of manufacturing organization to cater to an expanding market. How significant this growth was even in purely quantitative terms in relation to the economy as a whole, we do not know. One thing, however, is certain. We do not have here anything comparable to the town to country movement of manufactures characteristic of early modern Europe or of

[1] Tavernier [104], I, 66; II, 6; *Dagh Register* [38] (1640–1), 308.
[2] Master [32], II, 81–2; Linschoten, I, 60–1; II, 3.
[3] Abū'l Fazl [123], II, 169, 192, 248, 356.

the urban movement which marked the beginning of revolutionary changes in society and economy. The 'innovations' in the Indian case were within the limits of a familiar circuit; whatever their potentialities, in themselves they did not mark any break with long-established patterns.

The relative lack of dynamism was characteristically expressed in the very limited range of forms of organization. An interesting contrast in this regard is offered by Ming and Ch'ing China where the silk industry occupied a position similar to that of the cotton-textile industry in Mughal India. The former made extensive use of wage-labour with the 'accounting houses' owned by wealthy merchants lending looms and material to the artisans. The artisans ranged from the very affluent employing others, to weavers who could not afford to own looms.[1] Such a hierarchy among artisans was not altogether absent in Mughal India though the extant evidence refers mostly to the mid-eighteenth century. We then come across affluent weavers in Bengal employing their own capital and selling freely on their own account, a clear distinction between richer artisans owning their own equipment and 'all others that do work being bound or hired' and, in Lucknow, even master craftsmen employing poorer artisans, as many as 500 in one case.[2] Even in the mid-eighteenth century, however, the rich artisan appears to have been peripheral to the system of production and it is even possible that his emergence itself was a late development linked to the growth of the market. The one truly important development in this direction was the emergence of the Parsee master-carpenter as shipwright, employing hired labour.

Virtually every relevant feature of the economy, society and the state was designed to hold the artisan firmly down to his lowly place in the scheme of things allowing very little scope for upward mobility or differentiation. Nearly every foreign observer spoke of the relentless tyranny suffered by the artisan, a description confirmed by the indigenous accounts of the manner in which *sā'ir* duties on manufactured goods were collected and literary references to extortions by even the village headmen. The whip and the cudgel were freely used not only by the nobles' minions but by the middlemen as well. The latter's manifold techniques for cheating the craftsmen included charging of interest on advances, shortchanging in the matter of currency in which payment was made and charging commission of up to 12 per cent.[3] Attempts on the part of the weaver or the buyer to by-pass the middlemen usually failed. We do not have any dependable estimates of the artisans' income

[1] Shih [498a].
[2] Datta [280a], 109–110; Bolts, 193–194; Bruton [95] (*Hakluyt's Collection of Early Voyages*), 55.
[3] Foster [31] (1661–4), 112; (1618–21), 343; *Diary of William Hedges* [33], 1, 81–3.

when they worked as independent producers. The data provided in the *A'īn* for the artisans' wages are probably good indicators. The minimum daily wage mentioned by Abū'l Fazl was 2 *dāms*, the maximum 7 *dāms*, with different rates not only for different types of work but also for different grades of skill: the carpenters, for instance, were graded into five classes with the wages varying from 7 to 2 *dāms*. Two *dāms* would buy about 18⅔ lb. of millet or 14 lb. of gram, the most common items in the poor man's diet. With wheat and lentil at 12 *dāms* per 10 maunds (about 56 lb.) an artisan with a relatively high income or small family would presumably be able to afford these 'luxury' items too, as well as milk (25 *dāms* per maund) and curd (18 *dāms*). Pelsaert specifically mentions *ghī* (150 *dāms*) as a commodity regularly consumed by the poor at Agra. In short, the artisans' wages in real terms could vary from bare subsistence to a reasonable degree of comfort. If the maximum wages are any indicator, such incomes afforded no scope for savings that could lead to accumulation of capital. Abū'l Fazl mentions a relatively high pay for jewellers and workers in precious metals, especially two groups of workmen – coin engravers (20 *dāms*) and pearl-borers (10 *dāms* for each pearl of the first class in addition to daily wages).[1] If such artisans emerged as capitalist employers or, what is more likely, independent artisans with enough capital to procure their expensive raw material, we have no direct evidence on the point: mercantile profit, a major source of high income which contributed to the upward mobility of artisans in Europe, was virtually absent in the Indian case.

In fact, mobility of any sort – beyond the movement of rural producers to the localized centres of production – appears to have been strictly limited. The major example of occupational mobility was from agriculture to weaving. In parts of southern India, several occupations – carpenters, braziers, goldsmiths and stone-cutters, were included in the same caste-group allowing a certain degree of horizontal mobility.[2] The instances of artisans moving from one region to another were few. In the 1660s, the English found it difficult even to bring weavers from Kasimbazar to Hugli and failed totally to get them to Madras 'for their caste and lineage is such that they shall lose their birth right if they come upon salt water'.[3] Skills, too, did not travel easily from one region to another. The Dutch failed to get the Gujarat type of cloth produced in Bengal because Gujarat weavers were unwilling to share their secret.[4] The hold of tradition was characteristically reflected in the fact that the artisans' corporate organizations were not primarily economic in character, but simply their caste organization which automatically excluded 'outsiders'. The impressive edifice of India's manufactures

[1] Abū'l Fazl [123], II, 16, 22, 65 ff., 235.
[2] Rao [461], 286–94.
[3] See: Chaudhuri [269], 151.
[4] Prakash [449].

rested on the labour of men and women who meekly pursued their hereditary occupations, with hardly any hope of a better life, exploited and abused by rulers and merchants alike.

Sometimes, the worm did turn. In 1630, at Broach 'the weavers grew into a mutiny' against the English demanding that the latter should stop buying cotton yarn. The weavers of Baroda left the city in protest against the governor's tyranny.[1] In 1686, the entire Indian population of Madras went on strike 'under the orders of the heads of castes' to protest against a tax levied by the English. Such instances of resistance were rare and have to be read together with the fact that the use of the horsewhip by the merchants' servants was accepted as a normal fact of life by most artisans. The rare act of revolt does not reflect the tension that goes with a dynamic situation.

The most significant innovations of the period were the growth of organizations involving the employment of large numbers of artisans. These, of course, were not typical, for the nature of the demand and the economies of scale were not such as to favour large organizations. Even the typical large organizations were not set up to achieve any economies of scale. The technology which hardly made any use of fixed capital equipment or power also did not have much use for centralized production. The real reasons for setting up organizations employing up to several hundred workmen under centralized control are to be found – the biggest-known unit of this type was the Dutch silk factory at Kasimbazar employing 700 to 800 weavers – in two special circumstances: the need to ensure the quality and regularity of supply and to bind-up producers so as to exclude or limit competition from other buyers. The European Companies, catering to markets which insisted on standardization and forced to trade for high rates of profit in view of their high costs, felt both these needs very keenly. Hence, a form of organization, which was probably known to Indian merchants, came to be used by them more extensively. Employment of a body of workers under centralized control was also necessary in productive enterprises involving 'assemblage', such as shipping and construction work and in extraction industries. Techniques which included boiling or steeping – as in dyeing and processing of indigo, or refining saltpetre – also could benefit from such arrangements. Yet how atypical centralized or large organizations were can be gauged from the fact that even in such areas of manufacture the characteristic units of production were small or *ad hoc*, often both. Until the emergence of the Parsee shipwrights in the eighteenth century in response to the steadily expanding European demand, the organization for shipbuilding appears to have consisted simply in getting the carpenters together and providing them with the

[1] Foster [31] (1630–3), 22; (1634–6), 290.

raw materials when a trader wanted a ship built. In diamond mining, the mine workers were under the control of the local governor whom the 'fortune-seekers' paid so many *pagodas* per ten or more workers, the governor providing the tools as well. At Kollur, a prospector might employ 200 to 300 miners, at Gollapalle near Bezwada ten to forty was the more usual number. The enterprise involved no aquisition of asset nor investment of capital beyond what was required to pay the workers and the governor. The imperial *kārkhānas* employing a wide variety of artisans – embroiderers, goldsmiths, painters, varnishers in lacquer-work, joiners, turners, tailors, shoemakers, armourers and the like – on a regular wage basis were perhaps the largest manufacturing organizations in the country, but their primary object was to cater for the needs of the imperial court and the army, not production for the market. Production for the market under centralized control employing wage-labour developed as a characteristic feature of the European Companies' procurement. They imported copper kettles and pans from Europe, superior to the local iron pans and set up saltpetre refineries – the Dutch at Hugli and Pipli, the English at Ahmedabad.[1] Similar establishments were set up for processing textiles, especially silk – for bleaching, dyeing, painting, printing and winding or reeling of silk – and European experts imported to instruct local artisans in particular techniques. In Bengal around the time of Plassey, Armenian traders had similar silk-reeleries employing wage workers. Wage labour, treated as a normal feature of manufacturing activity in the *Ā'īn*, was widely prevalent by the end of our period, but the employment of a large number of workers for the most important lines of production, like textiles, appears to have been confined by and large to the European companies. As a form of organization, the small-scale family-based unit was not displaced from its position of primacy.

The organization of manufacture in Mughal India did not remain unchanged. A lot was happening, but on a limited scale, and the sum total of new developments did not amount to a break with the past: continuity was still the dominant characteristic. Yet the changes in organization were more basic than those in technique. *Dādnī* and localization of manufactures, more than the peripheral changes in the technology of silk production or saltpetre refining, accounted for the undoubted growth in output. The limited changes in organization performed the role of technological development: but these were not drastic enough to induce any dramatic change in productivity. Still here was a clear response to the widening scope of a market economy. But the persistent dominance of family-based small work-units indicates that any disciplined organization of an industrial society was not in sight.

[1] *Dagh-Register* [38], (1663), 370–3; Master [32], II, 173–4.

Contrary to popular assumptions, the rates of saving in pre-industrial societies were not uniformly low. In the case of Mughal India, the massive expenditure on roads, monuments, fortifications and equipment of the army as well as the immense liquid assets of merchants and nobles suggest that the surplus over the consumption needs of the population accounted for a high percentage of national income, especially considering that an agricultural technology which was backward compared to that of Europe, China or Japan around the same period, implied a correspondingly low level of output. England, according to Gregory King, had a savings rate of less than 5 per cent around 1688 while the estimated savings rate in pre-industrial Europe fluctuated violently between 2 and 15 per cent.[1] The potentialities of savings in Mughal India, with its high concentration of income in the hands of a small section of the population, were probably greater than in Europe. However, the life-style of the nobility with its heavy emphasis on conspicuous consumption acted as a brake on savings. If we are to believe Bernier, Shāhjahān, whose income exceeded the joint income of the Turkish Sultan and the Shah of Iran, never amassed even 6 crores of rupees, excluding his treasure in gold and jewels.[2] Mercantile savings, though impressive enough in many instances, were also affected by large expenses on weddings and funerals which, to quote Ovington, 'drains their Fortunes, and keeps them low'.[3] The artisanate, with hardly any access to mercantile profit and poor remuneration for high skills, had very little savings. Whatever the ratio of savings to national income, savings did not equal investment. Limited opportunities for productive investment, absence of institutions for channelling savings into production and the fact that savings accumulated mainly in the hands of social groups – nobles and traders – not involved in productive activities, inevitably converted a very large proportion of savings into hoarding, which also offered a measure of economic security in situations of political uncertainty. For the same reasons, even the poor hoarded their meagre savings, as was proved by their use of bullion in times of famine. Use of ornaments – of gold and silver whenever possible – by the rich, not-so-rich and even the poor was another form of hoarding which siphoned savings off productive investments.

Manufactures accounted for a mere fraction of capital investment which mainly went into irrigation, roads, fortifications, urban housing for the well-to-do and the merchants' working capital. The structure of demand as well as the technology of manufactures severely restricted the possibility of capital formation in the manufacturing sector. In a sense, the fortifications, urban constructions for public use (e.g. *sarāis*)

[1] Cipolla, *Before the Industrial Revolution – European Society and Economy, 1000–1700*, 40.
[2] Bernier [102], 221–2.
[3] Ovington [108], 194.

to which both the nobles and merchants contributed and, of course, the roads – items which consumed large volumes of capital – represented infrastructural investments which were relevant for manufactures as well. Urban housing, at least some of which had mortgageable value,[1] also represented a form of capital formation but since the great bulk of such housing was made of very flimsy material, the relative magnitude of such capital formation was probably insignificant. Artisans investing part of their savings in urban housing as a source of rental income – a common practice in Europe – had no Indian counterpart. In manufacturing itself, the ratio of labour to capital was probably one of the highest in India.

All our sources speak of the extreme simplicity of the Indian artisans' tools – which cost very little – and the bulk of the capital required came from the artisan's meagre savings. His savings, as much as his income, were geared to a hand-to-mouth existence, the surplus from a season's earnings providing the means for production in the next. Accumulation over a period of time hardly entered the picture except in the form of petty hoarding as a nest-egg against a rainy day. Since the technology virtually excluded all use of power, there was very little by way of fixed capital. The capital generated from the artisan's own savings as also the advance in cash and kind provided by the merchant in the commercialized sector of production, were predominantly in the nature of working capital. Our information regarding the relative magnitude of inventories is inadequate. The artisan himself does not appear to have kept any goods in stock. The fact that the European Companies needed to specially order their supplies, generally through middlemen, was no doubt partly due to this lack of inventories, though the special characteristics of their requirements with their emphasis on standardization also necessitated such an arrangement. Peter Mundy's frustrated lament from Patna in 1632 probably had a relevance to the country as a whole: 'It may be alledged', he wrote, 'that other Merchants make greate Investments here, and whie might not I? It is graunted, but theie are such whoe have used this trade a long time, *goe gatheringe of it by little and little* from towne to Towne, knowe its valewe and where to finde it, so that in 5 or 6 monethes they may procure 40 or 50 corge [score of pieces] or perhaps 100. But wee were sent as though wee should finde heare readye what wee wanted...'[2] As against this, we have Bernier's reference to the Delhi warehouses where costly merchandise was stocked[3] and the more detailed accounts of Buchanan Hamilton

[1] There is evidence of urban houses being mortgaged in Ahmedabad in 1632. The well-known merchant Shāntidās Jauhari is mentioned as one of the mortgagees. See Commissariat, *History of Gujarat*, II, 143–4.

[2] Mundy [96], II, 145.

[3] Bernier [102], 248–9.

from the early nineteenth century describing the '*golās*' of both retailers and wholesalers as a part of the traditional system of trade. Inventories of manufactured goods thus appear to have been features of commercial life, but the system of procurement based on annual orders and advances to producers suggests that it was of relatively little importance. The fabulous amounts of liquid assets held by the merchants at any given time were in effect a form of hoarding since they represented so much savings kept away from circulation and, of course, from productive investment. Even the two major forms of large-scale enterprise – shipping and mining – involved very limited investment of capital. According to Bowrey, in the Golconda diamond mine areas any merchant adventurer could 'purchas a piece of land...but at deare rates', paying as much as 8,000 to 20,000 pagodas for a small plot of land.[1] But Streynsham Master, a more dependable authority, wrote, 'Those that imploy the miners doe not buy the ground, as some have reported', but secured a licence from the governor, paying 3 to 5 pagodas per month according to the number of labourers employed. Here, again, the major form of investment was the working capital needed to pay the labourers, some 30,000 to 40,000 of whom worked in the area from Golapalle to Malavilli and Rajpet, though the average prospector did not employ more than forty men.[2] The flourishing shipping industry, too, did not involve any capital formation in the shape of large dockyards or plants but was based on *ad hoc* organization using the skilled labour which was attracted by the growing demand and which settled in the neighbourhood. Thus in every area of manufacture, labour remained the chief input with working capital partly provided by the merchants playing a crucial role wherever the artisan's resources were inadequate in relation to the market demand. The flow of bullion in the seventeenth and eighteenth centuries which, according to one view, caused an inflationary trend in India did not, however, generate any mobility of capital or a downward trend in interest rates. Capital was concentrated in the major trading areas, especially Gujarat, and interest rates were much higher elsewhere without causing a flow of resources to the capital-scarce regions. The relevance of this fact to manufactures was that the production dependent on *dādnī* in a capital-scarce area like Bengal had to absorb the hidden cost of higher interest rates. On the other hand the *dādnī* system, by reducing the uncertainties of supply, reduced the real cost of credit. All in all, capital, especially in its fixed and tangible forms, was relatively unimportant in India's manufactures. One advantage and, perhaps, *raison d'être* of this situation was that wars and famines, which usually destroy capital and dislocate production, did not have any very long-term

1 Bowrey [106], 112.

2 Master [32], II, 173–4.

effects on Indian manufactures. Textile production in Gujarat after the devastating famine of the 1630s and silk manufacture in Murshidabad district after the Maratha raids of the 1740s could return to normal within a remarkably short time.

In striking contrast to India's pre-eminence as an exporter of manufactured goods, her technology was remarkably backward in comparison with the other advanced civilizations of the period, especially western Europe and China. Her world-famous textiles were produced without the aid of multi-spindle wheels known to China from at least the early fourteenth century and, of course, she had nothing to compare with the water-powered throwing-mills with 200 spindles of the Italian silk industry. Her seagoing vessels were devoid of virtually all modern nautical instruments with the probable exception of the astrolabe. The massive Mughal monuments were constructed without the use of even such elementary aids to human labour as the wheelbarrow. India did not know of the uses of coal, had no proper cast-iron, was unfamiliar with the techniques of deep mining and her chemical industry was, at best, primitive. Not merely did she lag behind Europe and China in all these, the country's shortcomings in fuel resources, metallurgy and chemical industries effectively blocked any prospect of wide-ranging technological development. Even such elementary objects as screws with proper grooves essential for most mechanical processes were not produced. Watermills and windmills, in use for centuries not only in China but in neighbouring Iran as well, were peripheral to the technology of the period. And despite its contact with both Europe and China and its knowledge of block-printing, this highly literary culture showed no inclination to replace the copyist by the printing press. The overall picture was surely not one of any 'distant announcement of industrial revolution'.

In fact, the extreme simplicity of instruments and a general indifference to labour-saving devices were perhaps the most characteristic features of India's manufacturing techniques. '...In India it is seldom that an attempt is made to accomplish anything by machinery that can be performed by human labour',[1] wrote Buchanan in the early years of the nineteenth century. The statement is a very apt description of Mughal technology. As Fryer, marvelling at the skill of the Indian jeweller, commented, '...where was to be wondered the Tools he worked with, more than his Art, because we see it surpassed in Europe; but with far more invention of instruments. Here Hands and Feet being all the Vice, and the other tools unshapen bits of iron.'[2] The yarn for the famous muslin was produced, not even on the spinning-wheel, but by twirling the simplest of spindles consisting of a needle and a small disc. The

[1] Buchanan [242], III, 41.

[2] Fryer [107], I, 284.

weaver's loom with its horizontal frame and foot-treadles was a rudimentary instrument though the more complex draw-looms were probably also in use for the production of complex coloured weaves.[1] On building sites, construction material was transported on the wheel-less hand-barrow. Having no lathe to cut screw grooves, the Indian blacksmiths simply 'fastened to each of the two pieces that are to enter into one another, some Iron, Copper or Silver wire, turned Screw wise, without any other art than of souldering the Wire to the pieces',[2] an instance of weakness at cutting and drilling tools. Manpower was used to stamp the enormous output of Mughal coins, since in the absence of compound cranks to convert rotary into reciprocatory motion even animal power could not be used for the purpose.

In certain lines of production, a measure of sophistication had been achieved despite the dominant non-mechanical bias and the basic simplicity of Indian technology. The one 'heavy industry' of the period, the manufacture of cannon and hand guns, was technologically the most advanced. In the sixteenth century, India produced the heaviest cannon – cast of bronze – of which the most famous was the *Malik Maidān* 12 feet 4 inches in length. As such pieces were not easily manoeuvrable, lighter iron cannon were also produced, though these were mostly made of wought-iron since the technique of casting iron was not perfected. In the line of hand-guns, Bernier praised the excellence of the Indian muskets and fowling-pieces.[3] Both matchlock and flintlock were manufactured for the imperial arsenal in the seventeenth century. *Bān*-rockets 'made simply of bamboos, with iron cylinders containing combustible material' anticipated and inspired the first European rockets of the early nineteenth century. Again, despite the general absence of precision instruments, the Indian astrolabe helped determine latitudes with remarkable accuracy. Even in the construction of ships, copied from European models, the Indian shipwrights improved on the original; their method of riveting planks proved functionally superior to caulking and the *chunām* – a lime compound – dabbed on the planks provided a protective against sea-worms. While water- and wind-power was generally not in use, watermills were not unfamiliar in the Deccan and water-power was used with great ingenuity in the north-western district of Hazara to manoeuvre a wooden trip-hammer for milling rice. The vertical wheel used for the purpose was also to be found in the water-driven cotton gin in another part of the same district. At least the latter, Habib thinks, was a local

[1] For a detailed description of manufacturing technology in the Mughal period see: Habib [349]. The data for the section on technology are taken from this paper except where otherwise indicated.

[2] Thevenot [103], 66.

[3] Bernier [102], 254.

invention. The technology in India's most developed manufacturing sector, textiles, was no doubt surprisingly simple. Yet, expectedly, on some points such as the application of resists to confine colours to patterns, it was superior to its European counterpart. Similarly in certain 'minor' arts, such as 'lacquer work...which could not be pierced with the sharpest bayonet' or soldering gold on brittle semi-precious stone, Indian craftsmen had discovered techniques unknown to Europe at the time.[1]

The popular impression that Indian technology was altogether stagnant also does not conform to facts. In fact, in more than one important area of manufacture, the Indian artisan showed a remarkable capacity for imitative innovation. The most striking development along these lines was the production of European-type shipping in the second half of the seventeenth century. As late as 1636, to avoid buying European-type pinnaces from the Portuguese on the west coast – who apparently charged monopoly prices – we find the English at Surat ordering small pinnaces from home.[2] The only Indian involvement in the production of this type of shipping was sheathing 'with boards of this country'. Writing of the ship-carpenters of Surat some fifty years later, Ovington reported that they would 'take the Model of any English Vessel, in all the curiosity of its Building and the most artificial Instances of Workmanship about it, whether they are proper for the convenience of Burthen, or of quick sailing, as exactly as if they had been the first contrivers'.[3] Writing in 1668, Oxenden went further to assert 'that these carpenters are growne soe expert and masters of their art that here are many Indian vessails that in shape exceed those that come out of England or Holland'.[4] In the manufacture of armaments, very probably the flintlock was a development of the late seventeenth century as was the production of heavy cannon. Aware of their technical backwardness – mainly due to their failure to develop cast-iron, the Mughals attempted, apparently without success, to recruit European gunfounders. A technique of casting iron for the production of anchors, though these were 'not so good as those made in Europe' was, however, noted in Orissa by Hamilton in 1708. In textiles, according to Streynsham Master, the manufacture of carpets on upright looms was introduced in Andhra by Persian immigrants in the sixteenth century.[5] The labour-saving technique of colour printing with wooden blocks was also probably a seventeenth-century innovation. Methods of silk-reeling in Bengal were improved under the guidance of European experts at the instance of the Dutch and English companies. 'They

[1] Ovington [108], 167; Thevenot [103], 55–6.
[2] Foster [31] (1634–6), 148–9.
[3] Ovington [108], 166.
[4] Foster [31] (1668–9), 80.
[5] Master [32], 171.

imitate every thing wee bring and embroder now as well as wee,' wrote Sir Thomas Roe of the Indian weavers and tailors. Ovington thus commented on their skill in imitation: 'The weavers of silk will exactly imitate the nicest and most beautiful Patterns that one brought from Europe... *The Tailers here fashion the Cloaths for the Europeans*, either men or women according to every mode that prevails and fit up the Commodes, and towring Head-Dresses for the Women with as much Skill, as if they had been an Indian fashion, or themselves had been Apprentices at the Royal Exchange.'[1] The history of Indian technology has yet to be written, as we do not know if the earlier ages also had a similar record of continuous minor and not so minor innovations. The demands of the Mughal state and the expanding overseas market as well as direct contact with the fast-growing technology has yet to be written, and we do not know if the earlier ages spurt of innovations, yet it was not of the order which leads to a break with inherited traditions or ultimately removes the bottlenecks in technology and fills the gaps in scientific knowledge.

A level of manual skill which bordered on the fantastic served as a substitute for sophistication of techniques and instruments. European observers never ceased to marvel at the 'matchless ingenuity' of the Indian artists, generally 'destitute of tools' who in many things could 'out-do all the Ingenuity of Europe'.[2] This high level of excellence was particularly noticeable in all branches of the textile industry, but was also noted with admiration in connection with such diverse areas of manufacture as jewellery, objects made of steel, 'excellent muskets and fowling pieces' and shipping. It has been suggested that this excessive development of manual skill in combination with the rudimentary character of the tools used, implied a low level of productivity. Since, however, the objects produced by the skilled artisans included a very wide range of luxury articles of great value, any assessment of productivity would need to take into account not merely the volume but the value of the output. While there were institutional as well as economic factors which inhibited increase in output, the Indian artisan was at least not subject to the European-type gild restrictions which forced production to move to the country to meet the demands of an expanding market. The characteristic weakness of Indian manufactures as a potential 'growth sector' in the economy was a lack of standardization and of emphasis on quick turnover to produce cheap goods. There again the domestic demand did not call for standardization, and when this was seen to be the requirement for the European market, the weaver adjusted his looms accordingly, albeit with some reluctance.

[1] Roe [87], 449; Ovington [108], 166–7; also Tavernier [104], I, 46.
[2] Bernier [102], 254; Fryer [107], I, 122; Ovington [108], 167.

The stagnation of the Chinese economy after an early spurt of inventions and innovations has been explained in terms of a 'high equilibrium trap',[1] the functioning of the economy at a high level of efficiency which precluded pressures and stimuli that could force it up to an even higher level. Such an hypothesis would not be altogether irrelevant to the technology of India's manufactures during the Mughal period. A manufacturing sector that kept a population of some 100 million self-sufficient in secondary products, catered to a vast inland market for luxury goods, furnished the Mughal state with all that it required for its army and public works and also met the demands of a steadily expanding export market, cannot be described as weak or backward. Yet this impressive record was achieved within a framework of relatively stagnant and backward technology. Economic historians are increasingly wary of *ex post* explanations of technological changes; as has been pointed out, necessity explains little, because societies always have the choice of not responding to them. If it is difficult to explain what did happen, to explain what did not happen is much more so. One can at best identify certain features of the Indian economy and society which probably contained the roots of technological stagnation.

If necessity is indeed the mother of invention, its pressure in the Indian case was not insistent. Through centuries of experimentation a technology had been devised which could comfortably supply the demands of the domestic and the not inconsiderable foreign market. In fact, it even allowed for a certain slack in the utilization of the available labour or else the expanding demand in the seventeenth century could not have been met with only a minimum modification of organization and technology. India's manufactures experienced no pressure of competition for the bulk of the production was geared to the reciprocal arrangements of the rural caste organization and India enjoyed the position of a monopolist in her export markets. The demand itself did not expand with any dramatic suddenness. The population increased, if at all, very slowly and the additional demand in the export market accounted for a small proportion of the output. The remarkable cheapness of labour – be it the result of a genuine over-supply or of a highly oppressive system wherein a tyrannical state and an internalized set of values together kept the producer in utter subjection – rendered labour-saving devices superflous.[2] The nature of the demand itself favoured excessive specialization accommodated within the social

[1] Elvin [293].

[2] See, for instance, Fryer [107], I, 122 on Indian washermen: '...Labour being to them instead of Soap, for were they at as much Expense therein they could not live, their Pay being inconsiderable. And by this small Taste of their unwearidness in Painstaking, their Cheapness of every thing, their faring hard, all their other Craftsmen may be valued, who work for nothing comparatively with our Europeans.'

system through a proliferation of occupational castes and sub-castes. It was not merely the luxury market that called for minute specialization. Even the demand for textiles in the south-east Asian market was so specialized that particular varieties were supplied only by the weavers of certain Indian villages. In Bengal, each major variety of cloth was produced by a particular sub-caste.[1] 'A job which one man would do in Holland passes through four hands before it is finished', commented Pelsaert.[2] Both the psychology and the economics of such a system would be averse to labour-saving, mechanical means of production, best suited to turning out cheap standardized goods. Such a system would also necessarily generate a certain degree of changelessness, though in an otherwise vigorous economy this can never be absolute. There was a measure of rigidity about the hereditary character of the occupations which affected the Moslem artisans as well.[3] Exceptions to this pattern – the Parsees taking to weaving for instance – do not appear to have been quantitatively significant. Lack of mobility had a spatial dimension as well. Migration of artisans appears to have been confined within limited areas – usually from the countryside to the emporia and their *banlieue* – or induced by extreme calamity, though one does occasionally come across a different pattern, like the migration of weavers from Sind to Bombay or the practice of placing surplus trainees from the imperial *kārkhānas* 'with the nobles and the Rajas... all over the country'.[4] As against these, we have such evidence as the English Company's complaint against the Bengal silk-weavers who refused to move to Madras 'despite all the arguments we can use and the promise of great wages'.[5] The view that there was no resistance to innovation also cannot be accepted with qualification. During his travels in India in 1754 Ives noted that the artisans would 'plead the custom of their forefathers for which they have so great a veneration that they were never known even in a single matter to depart from it'. More specifically, the English factors at Balasore stated that 'use and custom among these weavers is not to be altered without a charge'.[6] The context suggests that what was demanded was something more than a rational economic return – a stiff price for innovation, to put it differently.

We have seen there were not so many good reasons for technological innovation or any form of mechanization in Indian manufactures. In fact, there were more good reasons for avoiding such innovation or

[1] Orme [443], *History of Indostan*, 413.

[2] Pelsaert [92], 60.

[3] Bernier [102], 259; Ovington [108], 165.

[4] Foster [31] (1630–3), 158 (migration of workmen during the Gujarat famine); *Bombay Gazetteer* [254], IX, Part 1, 189; Sarkar, *Studies in Aurangzeb's India*, 253.

[5] English Factory Records, Calcutta, VI, Part 1, f. 10 quoted in: Chaudhuri [269], 152.

[6] Ives [112], 52; Chaudhuri [269], 152.

mechanization. The characteristic concern for security of livelihood and consequent anxiety about over-population found in societies where manufacturers depended on stagnant markets was not absent in India. One may not accept Ovington's view that printing was discouraged to protect the livelihood of scribes and copyists, but we do have evidence that a technique for quadrupling the production of cannon-balls and nails introduced by the Dutch in 1672 was prohibited by the local authorities in Coromandel out of a similar concern. Since neither merchants nor any other affluent groups were involved in production, innovation or mechanization would have to be pioneered by the artisan. In so far as almost any innovation implied a measure of risk and some investment of capital, the Indian workman living on the margin of subsistence had hardly the means to undertake it. Besides, he had no incentive to do so. For they were only 'nominally free', their status 'differing very little from voluntary slavery'.[1] Excepting the fortunate few protected by kind patrons, the Indian artisan lived a life of utter misery, underpaid, flogged and kicked by the minions of nobles and traders alike. Unlike his European counterparts who could aspire to the ownership of urban property and even, on occasion, a knighthood, he had 'no hope of distinction' and was not 'permitted to purchase either office or land for the benefit of himself and family'.[2] The existence of caste gilds and the rare instances of resistance mitigate but little the horrendous aspects of the artisans' lives. Basic security of livelihood, if not mere survival, rather than any quest for profit was the natural response to these conditions. In such a situation, the limited technological innovations such as in shipping or armaments were initiated by the profit-seeking merchant or the state.

In the society as a whole, there was a remarkable lack of preoccupation with things mechanical. The most outstanding historical example of widespread technological change in pre-industrial times occurred in an atmosphere of great intellectual and scientific excitement. It generated *inter alia* a preoccupation with things mechanical independent of their utility, a view of the universe as a vast clockwork mechanism and of God himself as a great mechanic. In a different clime, we find the Japanese élite in the seventeenth century risking their necks in quest of the contraband 'Dutch learning' to find out more about western science and technology while the Chinese took apart the European watches to unravel their mystery. The Mughal cognoscenti of Christian theology and the admirers of western 'toys' were apparently inspired

[1] Pelsaert [92], 60. The *Dagh Register* [38] of 31 July 1663 has the grim comment that the workers in the diamond mines when sold into slavery 'should be considered more fortunate than heretofore for in the mines they suffer the worst slavery in the world' ([38], 373).

[2] Bernier [102], 228.

by a different brand of curiosity. The geographical configuration of northern India may help explain the non-utilization of wind- and water-power. It is still difficult to resist the conclusion that the drives and concerns of Indian society were unlikely to generate that cluster of interrelated innovations, spontaneous or adoptive, which constitute a technological breakthrough.

In industrial societies, a large and expanding tertiary sector is generally associated with an advanced stage of economic development. All evidence suggests that services in various forms accounted for a very high proportion of total employment in Mughal India. This fact, of course, was not an indicator of rapid growth or high performance. Moreland described the bulk of the workforce producing services as 'consuming classes' who did not contribute to the production of wealth – an unwittingly Marxist view of productive effort imposing value judgements as to what is useful on consumers in every age and society. To him a very large 'consuming class' was an indicator of economic backwardness and an exploitative society. Put in less value-laden terms, the Mughal state with its expansionist tendencies, centralization of authority and an elaborate machinery of administration, created an enormous demand for manpower. The administrative system also tended to concentrate wealth and income in the hands of a relatively small group of officials-cum-nobles whose pattern of demand greatly emphasized services, especially for purposes of display, thus reinforcing the trend towards a large tertiary sector. On the supply side, coercion by those in control of state power explains little. In the affluent city of Surat for instance, we are told, slaves and servants were both cheap and plentiful.[1] Possibly, rural society with its stratified rights in land and groups of 'landless' village servants contained elements whose precarious livelihood was often jeopardized by famine, wars and official oppression creating such a steady and plentiful supply further augmented by capture of slaves. The fact that both peasants and artisans had to pick up the slack in response to market demand also suggests patterns of under-employment which could contribute to a flow of job-seekers in urban areas. The situation also had a positive element in it. A very large proportion of the available manpower was withdrawn from the production of consumer goods without creating any chronic shortage of food or clothing or reducing consumption to very low levels by pre-modern standards. In other words, productivity of land and labour was sufficiently high to render this possible – to make available a large workforce for the service of the state and the affluent.

It is difficult to define precisely the socio-economic character of the high officials serving the Mughal emperor. They did not constitute a

[1] Pietro della Valle [88], 82.

hereditary aristocracy with political-cum-proprietory control over land and its yield. They were more like commissioned officers recruited from among adventurous job-seekers of predominantly non-Indian origin, and generally distinct from the rajas and *zamīndārs* who were often virtually autonomous rulers over the territories for which they paid tribute or revenue to the emperor. In so far as the Mughal *manṣabdārs* served the state as courtiers and functionaries, their economic role was that of a modern civil service-cum-army commanders. On the other hand, the distinction between the Mughal state and its higher functionaries is beyond a point artificial since a major function of the state was to extract the surplus for distribution among the *jāgīrdārs* and their imperial master. When some of the *zamīndārs* and rajas were drafted into the Mughal's service as *manṣabdārs* and at times had their own land conferred on them as *jāgīrs* the distinction between officials and the social groups in hereditary control over land and local political power also became blurred. Besides, hereditary or not, once Akbar's experiment to pay the *manṣabdārs* in cash had failed, as a class the *manṣabdār-jāgīrdārs* functioned directly as extractors of revenue which was distributed among them through the system of *jāgīrs*. Hence, while one may object to the indiscriminate use of the term 'feudal' in relation to the society of Mughal India which knew little or nothing of fief, commendation, demesne or serfdom, as a class the Mughal official nobility shared with the hereditary aristocracy the political power to extract the surplus from agriculture. In other words, they were state officials whose mode of payment and relationship to the state conferred on them the character and functions of a landed aristocracy – a fact spectacularly reflected in their life-style – except that they remained predominantly urban. The economic consequence of the *manṣabdārī* system have been discussed elsewhere in this volume. It would be relevant to note here that to treat the Mughal officialdom only as consumers and exploiters is to imply that the functioning of the state had only negative implications for the functioning of the economy. Such a view would ignore the indubitably positive causal links between the Mughal peace and administrative centralization on the one hand and the growth of commerce, expansion of cash-crop production and urban development on the other.

The same considerations apply to any evaluation of the services of the lower functionaries working for the state as well as the nobles and the *zamīndārs*. This category included the *aḥadīs* or 'gentlemen-at-arms' below the rank of *manṣabdārs* on the primarily military side; on the civil side there was the large army of clerks who manned the central and provincial offices of the government as well as the *zamīndārs' kachehrīs* and the revenue officials who maintained the records, measured the land and assessed and collected revenue. The empire of the clerks encroached

further. As Fryer noted, the upper-class Muslims 'being proud, scorn to be taught', 'whereby few of their Great Men or Merchants can read, but keep a Scrivan of the Gentues'.[1] The personal staff of high officials often included *diwāns* and *bakhshīs* whose functions were probably similar to their namesakes' in government employment. In short, the clerks and officials must have accounted for a fair percentage of the workforce. The question of their economic utility aside, their income and, hence, purchasing power was by no means insignificant. As recent research has established, their earnings far exceeded their nominal salary through adoption of means oftener illegitimate than otherwise. In 1739 Nadir Shah extracted Rs. 3.1 million from eleven officials in Delhi – *diwāns*, *buyutāts*, *peshkārs* and *khazānchīs* – working for individual nobles or in the royal establishments. The amount included a payment of Rs. 275,000 on behalf of the *muḥarrirs* of the *khāliṣa* whose individual pay was probably in the range of Rs 10 to 17 per month. Many petty officials are known to have lived lives of great ostentation. Some went in for spectacular charities and one established a *pura* (a small township) in the name of his son.[2] Here, in short, we have a sizeable constituent of an affluent middle class whose numerical strength and importance have often been under-estimated.

The social origins of the petty officials suggest both a pattern of mobility and continuum in the socio-economic life of the period. The petty officials were recruited from among Muslims as well as Hindus, but the clerks were almost exclusively Kāyastha, Baniyās (both Jain and Hindu) or Khatrīs by caste. The trading communities' traditional familiarity with 'all Money-business' as Fryer put it, apparently gave them a virtual monopoly over jobs which involved accounting procedure. This implied a measure of mobility to and fro between commercial occupations and certain types of clerical and revenue posts. The author of *Ardha-Kathānaka*, a Jain trader, mentions that his father served as a *foṭadār* with the Karrānīs (Afghan rulers) for some years before returning to the family profession. Banārasīdās himself acted as a treasurer for some years in early youth. 'The positions of *khazīnadārs* and *dīwāns* in the *sarkārs* of the nobles were invariably held by money-changers, who in addition to their official duties also conducted their normal business.' Hīrānand Shāh, a forefather of the famous Jagat Seṭh, migrated from Rajasthan to Murshidabad and there became a *khazinadār* under the Mughals.[3] The mercantile castes were also very mobile geographically. The recuitment to local clerical jobs could thus draw upon a source that had links all over the country and the communal support available to the roving merchant was not denied to the candidate for clerical jobs if he belonged to the appropriate community.

[1] Fryer [107], I, 282. [2] I. A. Khan [380]. [3] I. A. Khan [380], 20–2.

The above account suggests the existence of a buoyant and reasonably affluent class of minor officials and clerks, on whom the machinery of government as well as much private business depended for their functioning. The social roots of such groups as well as the professional classes discussed below were not very different and in a way the plight of the petty functionary explains why the middle classes in Mughal India played no role comparable to that of their counterpart in early modern Europe. Foreign observers have commented on the semi-servile status of artisans which destroyed all incentives. The arbitrariness of the nobles and state power could at times prove equally crushing for the petty officials. One knows from Baranī's account that under 'Alā'uddīn people were reluctant to give their daughters in marriage to revenue officials for fear of the notorious Sharaf Qā'ī and his system of torture. To judge by Badā'ūnī's account of Raja Todar Mal's treatment of *karorīs* – 'many good men died from severe beatings...and from the torture of rack and pincers'[1] – conditions had not changed all that much under the humane Great Mughal and were surely not favourable to the growth of a care-free urban culture.

The absence of a 'middle state' in India, especially a professional class, was first commented upon by Bernier. Moreland, making a probable exception for Bengal, expounded on this theme and suggested that the absence of a market for the service of professionals whose livelihood depended on the patronage of the court or nobles probably explains this phenomenon. Bernier's statement implied a comparison with the European scene as he knew it. Describing Benares, an ancient seat of Sanskritic learning, he wrote: 'The town contains no colleges or regular classes, *as in our universities*, but resembles rather the schools of the ancients, the masters being dispersed over different parts of the town in private houses, and principally in the gardens of the suburbs which the rich merchants permit them to occupy. Some of these masters have four disciples, other six or seven, and the most eminent have twelve or fifteen; but this is the largest number'; '...entertaining no hopes that honours or emoluments may be the reward of extraordinary attainments, *as with us*, the scholars pursue their study slowly...'[2] (italics mine). Fryer, commenting on the medical profession drew a similar contrast: 'Physick here is now as in former days, open to all Pretenders; *here being no Bars of Authority, or formal Graduation, Examination or Proof of their Proficiency*...and those that are most skilled, have it by Tradition, or former Experience descending in their Families,' (italics mine). 'Pharmacy', Fryer continues, 'is in no better condition, Apothecaries here being no more than Perfumers or Druggists, at best; for he that has the boldness to practice, makes up his own medicine.'[3]

[1] Badā'ūnī [150], Lowe's trans., II, 192.
[2] Bernier to Chaplain, 4 October 1667, [102], I, 334–5.
[3] Fryer [107], I, 286–7.

With these relative judgements no one can possibly disagree. One of the areas where Mughal India compared unfavourably with Europe in the same age was undoubtedly in the relative weakness of its professional classes who, at best, were inheritors of traditions and neither innovators nor leaders of any forward-looking society.

Within these limitations, it would be incorrect to ignore the size and socio-economic standing of the professional classes or the extensive market to which they catered. Such an assessment must also take into account the concept of social utility current at the time as evident from the economic behaviour of the people. Patronage of the court, the nobles and the affluent generally were no doubt the single most important source of livelihood for the more successful among the professional people – poets, painters, scholars, physicians and the like. Their remuneration in such cases could be in cash or in rent-free grants of land whence the revenue due to the state became their income. But this was by no means the whole story. Tavernier, who hardly found any physicians 'except those in the service of the Kings and Princes' in the Carnatic, Golconda and Bijapur, added 'that in good towns there are generally one or two men who have some knowledge of medicine who seat themselves each morning in the market-place or at a corner of the street and administer remedies'.[1] Fryer explained that 'they pretend to no Fees, but to make them pay in their Physick'.[2] Established physicians and an extensive medical profession including trained men (*mutaṭabbib*, *ḥakīms* and *vaids*) as well as quacks (*nā-ṭabīb*) are mentioned in connection with such widely-dispersed places as Lahore, Sirhind, the capital cities, Jaunpur, Benaras and Bengal.[3] The *Mir'āt-i-Aḥmadī* tells us of two physicians at the state hospital in Ahmadabad whose pay however was 10 and 8 annas respectively.[4] In Bengal, the physicians constituted an important caste, many of whom apparently stuck to their traditional occupation. The scholar and teacher, as noted by Bernier in connection with Benares, were dependent on the munificence of the rich, but their life-style was by no means necessarily humble. A Benares Pandit, 'granted a pension of 2000 rupees' per year by Shāhjahān[5] and the affluence of the Navadwip scholar, Puṇḍarīk Vidyānidhi, described in Brindāban Dās's biography of Chaitanya, do not appear to have been atypical. On a lower rung of the social and economic ladder were the humbler professions of Muslim mullahs, Brahmin priests, astrologers, *ghaṭaks* – or marriage brokers – minstrels (*bhāts*) and the like. However, the successful professional enjoying court patronage did not necessarily come from the more respectable sections of society. Among the famous

[1] Tavernier [104], I, 240.
[2] Fryer [107], I, 288.
[3] I. A. Khan [380], 16–18.
[4] *Op. cit.* [167], (*Supplement*), 160–1.
[5] Bernier [102], 341.

poets of Akbar's reign were three who were sons of a grain-merchant, an arrow-maker and an elephant-keeper respectively.[1]

In estimating the size of the professional class, it has been customary to ignore the Mughal counterpart of modern entertainment and showbiz. 'Mountebanks and jugglers', acrobats, producers of fireworks, snake-charmers, dancers – (*lūliyānīs* and *kanchanīs*) who 'set themselves off with such advantage by a Rhetorical look and taking Air...that a grave European will scarce adventure himself in the sight of their insinuating temptations';[2] singers – or *kalāwants* – are mentioned as regular features of urban life, as well as necessary parts of the recreation of the rich in the countryside and a 'must' on festive occasions like weddings.[3] The line of demarcation between the dancers and the world's oldest profession was by no means clear. There is ample evidence to indicate that the numbers providing the latter service were indeed very large. Lahore had 'six thousand houses of ill fame' from which the *kotwāl* collected a weekly tax, a practice reminiscent of a similar tax in Vijayanagara.[4] 'Most governors', wrote Bowrey describing eastern India, '...doe allow that any woman...unmarried may lawfully turne common whore...and take her habitation among other whores in small villages...paying so much per mensem to the governor'. There is nothing to indicate that the practice was confined to eastern India. The yogis, sadhus and fakirs – some of whom were honoured by the emperors themselves – have been dismissed as parasites in Moreland's highly ethnocentric view of these institutions. To agree with him is to ignore the fact that these social groups performed many of the functions which monks and the organized church discharged in other countries. At relatively little cost, they provided spiritual solace for large masses of men who appear to have supported them very willingly.[5] As such they were no less a part of the tertiary sector than the learned divines.

The soldiers – maintained by the rajas, *zamīndārs*, the emperor and his officers – were no doubt the largest single group in the teritary sector. Moreland estimated the total for the whole of India at well over a million men. At a time when the population was estimated at about 100 million, this would account for more than 4 per cent of the adult male population assuming that the latter were about a fourth of the total number. In terms of income, the professional soldier, even when recruited from the poorer sections of society, was not necessarily worse off than the 'middle-class' professional. His monthly pay ranged from

[1] I. A. Khan [380], 21.

[2] Ovington [108], 153.

[3] Mundy [96], II, 216, 254; Ovington [108], 153; Bernier [102], 243; Raychaudhuri [464], 198.

[4] Manucci [110], II, 186.

[5] See, for instance, Fryer [107], I, 240–2: 'The Merchants as their Adventures return, are bountiful towards them, by which means some of them thrive on it.' Also his reference to an 'army' of fakirs at Surat.

a minimum of Rs. 2 for a wrestler to a maximum of Rs. 15 for a cavalryman. The latter figure was comparable to the physician's salary at the state-maintained hospital at Ahmedabad. Again, no absolute judgements on the economic value of the soldiers' services are possible. One can only say, almost tautologically, that the nature of the state created the demand for a disproportionately large army. Its economic benefits included its contribution to the level of peace and security maintained by the Mughals.

A vast array of servants and slaves was a characteristic feature of the life-style of the period. Notions of conspicuous consumption and comfortable life included the services of a large number of men and women, for display as well as minutely specialized functions. This was true, not only of the very affluent, but of 'everybody, even of mean fortune'.[1] Despite a fairly extensive trade in slavery, the bulk of such services was provided by 'free' labour in response to market demand. Since the servants catered to a widely-felt need and at a price, there is no reason to describe their services as uneconomic or anything but a contribution to the national product. We are concerned here with a portfolio of consumer goods and services very different from their modern counterpart. Servants cost very little, not more than about 10 shillings a month in 'wages, victuals and clothing' – on the west coast in the 1620s. Slaves cost hardly anything for, to quote Della Valle again, 'their dyet for the most part is nothing but Rice'.[2] Specialization was carried so far that a servant would 'consider it a sacrilege to touch the work of another servant'.[3] As to their numbers, the style was set by the imperial establishment. The 5,000 ladies of Akbar's *zenana* each had their own staff besides successive circles of female guards, eunuchs, Rajputs, and porters at the gate. The imperial camp had 2,000 to 3,000 servants besides the servants at the stables – four to seven for each elephant, four per dog presented to Jahāngīr by the British envoy – and skilled staff for hunting, shooting, hawking, pigeon-flying and the like. The army on march had two to three servants per fighting man, not counting the vast array of camp followers. The *amīrs* emulated this style, some employing up to 500 torch-bearers alone. In Golconda, no gentleman worth his salt would be seen abroad without at least an umbrella-bearer, a cup-bearer and attendants with fly-whisks. Even a *do-āspa manṣabdār* like Bernier could not 'possibly contrive with less than three men'.[4] Among those who produced services at the humblest level were categories whose relevance to the economy would be obvious in other social contexts as well. These included the 'peons' needed to accompany carts to help push or rescue these when necessary, palanquin

[1] Della Valle [88], I, 42. [2] De Laet [93], 90. [3] Bernier [102], 381.
[4] Thevenot [103], 101; Ovington [108], 223.

bearers and armed guards, all available on hire, and the so-called *ḥalālkhor*, 'the most abject and scandalous of all the inhabitants' to whom all food was permissible or *ḥalāl*, employed 'in sweeping the Streets, in carrying away the Dirt and Dung, in washing the dead Bodies' and other similar jobs defiling to Hindus and Muslims alike.

The pattern of complementarity in economic functions in the countryside emphasized the fact that the economic notions of the period did not distinguish between goods and services. The so-called service castes in the villages known by various local names included the priest, the barber and the washerman as much as the potter or the carpenter. The traditional mode of payment included fixed perquisites in cash or kind, *in'ām* land or both. Selling of services for cash or payment in kind was not unknown. The menial occupations, all comprised within the caste system were, of course, to be found in urban areas as well, but functioning there on a basis of cash nexus.

The manufacturing sector in the economy of Mughal India was certainly not stagnant. The expansion of the domestic and foreign markets and the rising public expenditure on urban developments, public monuments and the army suggest an upward trend in output and, very possibly, labour productivity. But the range of products remained narrow, undiversified and traditional. Unlike agriculture during the same period, Mughal manufacture can boast of no important new product. There were shifts in the composition of the export trade, but again no significant innovation requiring readjustments in the strategy of production. The unbroken self-sufficiency of the sub-continent's economy implied a failure to profit from possibilities of international specialization. The mini-revolution in commerce, making limited demands on the organization and technology of manufacture, contributed to little more than a near-involution in industry; the balance between the major sectors of production was not disturbed, the increased demand could be comfortably absorbed by a system of production ultimately rooted in the reciprocal arrangements of a caste society rather than market and exchange, and the trader who acquired a control over manufactures for the export market through the *dādnī* system functioned by and large within the framework of family-based small-scale production rather than take risks with disruptive innovation by seeking to establish centralized control on the entire process of production. Like the quantitative growth in colonial economies achieved mainly through an expansion in traditional agriculture, Mughal India achieved her increase in manufacturing output through the already familiar instruments of localization, *dādnī*, and taking up the slack. Truly large-scale organization employing wage labour remained peripheral, though in certain sectors of industry, work for wages became the characteristic

form of labour supply by the late eighteenth century. The persistence of traditional patterns was rendered easy by the monopoly India enjoyed in her major export commodities and the pervasive phenomenon of under-employment or over-population in relation to the productive resources of the country. There was no international competition to spur on any quest for profitable innovation and no compulsive quest for labour-saving devices. The artisan's unbelievably low income and standard of consumption kept costs low and competitive despite the expense and risk of transport across vast distances. Smallness of scale and family labour probably helped to keep costs low and gave the merchant greater bargaining power *vis-à-vis* the artisan than any alternative arrangement. An expanding world market for exports thus helped perpetuate a system which set severe limits on productivity. The traditional technology and organization for production thus survived virtually intact. Such modifications as were induced by the increased demand mark no decisive break with the past. There was no anticipation of the industrial revolution in the economy of Mughal India.

The feebleness of change was largely traceable to the inadequacy of market demand. The export markets of Europe and the New World were limited by the pre-modern technology of transport. The traditional markets in Asia, besides being subject to the same constraints, were further cramped by stagnation in output and a pattern of distribution which severely restricted demand for mass-consumption goods. The sub-continental market which accounted for the bulk of the manufactured goods, despite a degree of deepening as a result of greater integration, suffered particularly from the poverty of the masses. A relatively stagnant agricultural technology and ruthless exploitation of the producing classes appear to have kept the purchasing power of the masses and hence the demand for cheap goods at a low level. The demand for comfort goods was small; for the 'not-so-poor' were rather few in number and there were no sizeable Mughal counterparts of the buoyant professional class with a rising standard of living characteristic of late mediaeval and early modern Europe. The *amīrs*' spectacular life-style reinforced the more precious features of luxury manufacture demanding highly-specialized manual skills and hence an increasingly minute sub-division of labour which did not favour mobility or unaesthetic methods of mass-production. Quick expansion in the production of cheap goods, a concern for quick turnover and diversification of products – features typical of a buoyant manufacturing sector – were all conspicuously absent. If one may judge by later evidence, the characteristic response to this pattern of expansion in demand was the emergence of closed sub-castes with monopolies of particular skills. It is difficult to imagine a more ingenious social arrangement for inducing industrial involution.

The economic and technical factors which inhibited change and adversely affected productivity have been discussed earlier in this chapter, factors such as relatively stagnant demand, low levels of capital formation, inadequacy of economic incentives to producers as well as the producers' vested interest in an unchanging labour-intensive technology which, in the context of a limited market, assured them a security of minimum income no doubt going a long way towards explaining the very slow tempo of change. One cannot, however, ignore the causal links between this persistent inertia and certain institutions and patterns of behaviour which restricted economic effort. Those involved in manufacture came from the same social classes generation after generation. Unlike early modern Europe, Mughal India had no aristocrat or high cleric owning units of production. The artisan acquiring wealth and emerging as a capitalist was rare and atypical. The institutions of society and government exerted a downward pressure on the producer, holding him firmly to his place on the lowest rungs of the social and economic ladder. His self-perpetuating poverty reinforced a culture of hopelessness hardly conclusive to innovative effort. The dominant values of the ruling class who disposed of the bulk of the national product favoured unchecked consumption or the amassing of wealth: with this class investment in production did not have even a low priority. The highly sophisticated culture of Mughal India had little curiosity about the laws of nature and neither the élite nor the mass of producers manifested any curiosity, utilitarian or otherwise, about things mechanical. Unlike the Chinese artisans, the Indian craftsmen did not take apart the European clockwork to unravel its mystery nor did their noble masters, despite their fascination with such 'toys', ever express any curiosity as to how they worked. The movement of artisans from country to town, the growing tension between the merchant employer and his artisan employee, the freedom that went with city air and mine dust – familiar features of European life when the Mughals ruled over India – were conspicuous by their absence in the sub-continent's society and economy. If there was a cluster of factors contributing to rapid change in pre-industrial Europe, an oppressive and spendthrift ruling class, a heavily exploited artisanate restricted in its occupational mobility, and a culture without mechanical curiosity represented a different sort of cluster in Mughal India. An expanding market, organizational changes and imitative innovation in technology did constitute a powerful combination of features which could have induced a break with the established traditions in manufacture. But these features evidently did not acquire the magnitude necessary to disrupt an immemorial system functioning at the level of a high equilibrium. Industrial involution is perhaps not an inappropriate label for the history of manufacture in our period.

2 Maharashtra and the Deccan

RURAL INDUSTRIES

Although the distinction between the rural and urban industries was not always clear, there was a fairly uniform pattern of rural industries based on the caste system in the Deccan throughout the seventeenth and eighteenth centuries. As the situation in the western Deccan is much clearer at present than in the east, the following discussion refers mainly to the former.

Village artisans and servants were collectively called *balutedārs*, whose standard number was twelve: hence *bārā balutedārs*. Those who were regularly included in the twelve were carpenter, blacksmith, potter, leatherworker, ropemaker, barber, washerman, astrologer, Hindu temple-keeper, and Mahar (untouchable caste of village watch and other odd works). In addition to the above ten, any two out of the goldsmith, bard, Masjid-keeper (butcher), and bearer of burdens were also included in the twelve *balutedārs* in different villages and regions.

Besides the twelve *balutedārs* there was another category of village artisans and servants, who were called twelve *alutedārs* but were neither essential nor universal in the Deccan villages; only some of them were occasionally found in larger villages. They were the Lingayat priest, tailor, water-carrier, gardener, drum-beater, vocalist, musician, oil-presser, betel-leaves seller, watchman (distinct from Mahar), bearer of burdens, and goldsmith or bard.

The above list of *balutedārs* and *alutedārs* indicates that in the western Deccan at least weaving and dyeing, for instance, were certainly more urban than rural, for they were not included in either of the two categories,[1] while goldsmithery and tailoring could be rural. It is also indicated that even oil-pressing was not ubiquitous in the countryside; people of the village which did not have its own oil-pressers would buy the oil at the nearby market.

The *balutedārs* (and probably the *alutedārs* too) were divided into two classes: *watandārs* and *uparīs*. The former had a permanent right to work and receive remunerations in the village while the latter had no such right and were migratory. Such a permanent right was called *watan*, which was heritable and saleable. There seems to have been no basic difference between two classes in the mode of remunerations in kind and in cash so long as they worked in the village. But many of the *watandār balutedārs* held some plots of *inām* (Persian, *in'ām*) (rent-free)

[1] But there was in the early seventeenth century a little village near Goa, the people of which were mostly dyers. This might, however, be called a town rather than a village. Joshi, 'Johan van Twist's Mission to Bijapur, 1637', *Journal of Indian History*, 34, Part 2: 112 (August 1956).

land granted by the village community, such *inām* land also being included in the *watan*, and obviously cultivated by themselves. *Watan* (Persian, *waṭan*) was so cherished by society that it could be claimed even after absence from the village for two or three generations. An *uparī balutedār* could become a *watandār* only when he bought the *watan* (or a portion of it) from the former incumbent, or when the *watan* had been vacant for a very long period, and he had worked there as an *uparī* for a considerable time.

Balutedārs were not employed by particular peasant families as under the so-called '*jajmānī* system', but by the village community as a territorial whole, and served the villagers whenever their respective work was required; clients usually provided the necessary materials and the *balutedārs* worked upon them. They received the regular payment (*balute*) from all the peasants, the amount of which was customarily fixed per *watan*, usually in kind twice a year, but occasionally in cash. In a village near Saswad toward the end of the eighteenth century, the amount paid in cash was Rs. 10 for the carpenter, leatherworker, and ropemaker, Rs. 5 for the potter and blacksmith, and Rs. $2\frac{1}{2}$ for the goldsmith per annum per *watan*, hardly enough to sustain life. But in addition each of them was entitled to a customary share of offerings dedicated to village temples during festivals as well as to some occasional perquisites, and many *watandārs* held some plots of *inām* land. When there were several co-sharers of a *watan*, they did not divide among themselves the peasant families into distinct spheres of work, but shared the total income.[1]

At any rate it is clear that the productive activity of artisans employed by the village community was not primarily meant for commodity production based on a competitive principle but for the maintenance of the community life of the village as a whole. But this does not mean that they were forced to attach themselves to a certain village; they could sell their *watan* to their caste-fellows or simply abandon it and move to a nearby town or become migratory;[2] moreover, it seems that there was no objection to their working for nearby markets in their spare time and thus accumulate not a little amount of money. For instance, about the middle of the eighteenth century two goldsmiths employed in a village near Sangamner are stated to have each owned Rs. 50 to 200,[3] an amount hardly possible to accumulate through the meagre customary remunerations paid inside the village. Thus it was theoretically possible for the mode of employment and work of the village artisans to become disintegrated, and for the rural industries to be merged into urban

[1] For the discussion on *balutedārs* see: Kulkarni [386], 39–52; Kulkarni [387], 46–8; Fukazawa [308], 21–36. Also see: Sherwani [498], 190–1.

[2] Fukazawa [308], 22–3, 31.

[3] Parasnis and Vad [26], VII, No. 546, 155–6.

industries. But organization of the village community was so stable that such a trend was hardly observed in practice, and village industries maintained their characteristics during the period under review.

URBAN INDUSTRIES

As mentioned above, the artisans regularly employed by village communities were rather uniform and limited in kind; the rural folk were more or less in need of products manufactured by urban industries (e.g. clothes and iron, and paper for accountancy). Moreover, there was a great demand for urban industrial products for exports as well as the urban population. Therefore various industries were considerably developed in cities and towns in the Deccan during the period under review, though our information on them is quite scanty.

The most important of the urban industries were cotton- and silk-weaving. Throughout the seventeenth century Aurangabad, for instance, was famous for white cotton cloth and silk-stuff, and Burhanpur for fine white and printed cloth, which was exported in quantities by Persian and Armenian merchants to Persia, Arabia and Turkey. Especially the cities of the Quṭbshāhī kingdom produced a large quantity of printed cloth which was claimed to be the best to be found in India. They also manufactured all sorts of calicoes which were as cheap and plentiful as in any other part of India, but different in texture and pattern from those of other regions. The painted cloth of these cities was also quite famous all over India due to the special dyestuff called *chay*, which was produced only in the eastern Deccan, and monopolized as a rule by the king.[1] While carpet weaving was also widely spread in many parts of India, Warangal was a centre of the industry, and in Coromandel coastal cities such as Masulipatam, Persian immigrants were engaged in weaving of Persian carpets for export.[2]

In the same kingdom a town named Indalwai near the modern Nizamabad was the centre of the manufacture of swords, daggers and lances which were made from iron that was mined in the Kalaghat hills.[3] In this kingdom the iron and steel industry was also developed both for domestic use and for export. Especially during the 1660s the Dutch merchants on Coromandel were in such a great need of pig-iron, iron bands, iron bars and cannon balls, that they organized a manufactory system of production for these items in their factories,[4] to which we shall refer again.

On the western coast, too, Chaul was famous for fine linens and silk

[1] Manucci [110], II, 428–31; Moreland (ed.) [89], 35.
[2] Sherwani [498], 475; Fawcett [297], IV, 121 (note 3).
[3] Sherwani [498], 475.
[4] Moreland [89], 38; Raychaudhuri [465], 173–4.

cloth till about 1670, and Bhivandi also excelled in the weaving industry.[1] A small town named Lantegree was a great centre of coral polishing in the early seventeenth century.[2]

In the second half of the seventeenth century papermaking was undertaken in towns like Junnar. There cotton rags were steeped in water, beaten, brought into the form of paper, cut into sheets, dried in the sun, and polished. Besides, the Mughal governor at Junnar had learned several handicrafts from Europeans and tried to promote them, though details are not known.[3]

In the first half of the eighteenth century when the Marathas achieved their zenith of power, urban industries in the western Deccan seem to have further developed, and brassworks of Kalyan, ornamental paper and silk-works of Aurangabad, and ordinary paper of Newasa were some of the most reputed.[4] Poona, the *de facto* capital of the Marathas appears, however, to have been a predominantly consuming city, having few industries by the middle of the century except for the *kārkhānas* established by the government. The few industries included coarse-cotton weaving, basketmaking, and perfume-making.[5]

Next the urban industrial organization may be surveyed briefly. First, there is hardly any doubt that, like the rural industries generally, the urban industries too were based upon the caste division of labour as a rule, but not always very rigidly. In the western Deccan during the first half of the eighteenth century, for instance, a section of the tailor caste changed their occupation to dyeing, though it tended to form a separate caste or sub-caste.[6] At any rate, unless we assume a considerable mobility of the people between different industrial occupations we cannot explain how the supply could be adjusted to a steep rise or fall of demand for certain industrial products (e.g. iron and steel at Coromandel),[7] and why new industries (e.g. papermaking) could be introduced in the medieval Deccan.

Though each occupational group had its own regional chief (*mehetare*), his function is not clear. At any rate it is not certain whether each urban industry in the Deccan was organized into a system like a guild, as was the case in medieval Ahmedabad.[8] In the eastern Deccan before the Muslim conquest there were various 'trade guilds' which were obliged to collect taxes from their members for the state.[9] But the condition under the Muslim rule is not clear. When the British in Bombay imposed

[1] Foster [31] (1618–21), 289; Kulkarni [387], 220–1.
[2] Foster [31] (1618–21), 265.
[3] Fryer [107], I, 334, 351–2.
[4] Parasnis and Vad [26], II, Nos. 241–4.
[5] Gadgil [311], I, chapter 4. There gold and silver thread-making was introduced perhaps in 1766–7, silk weaving at the end of the century, and brass and copper industry at the beginning of the nineteenth century.
[6] Fukazawa [306]; Sinha (ed.) [512], 236–7.
[7] Raychaudhuri [465], 173–4.
[8] Gillion [314], 23.
[9] Richards [467], 17.

strict regulations on local goldsmiths and silversmiths to prevent them from debasing their products in 1675, they were 'framed on the model of those of the corresponding guilds in London'[1] (viz. not on any Indian model). In the eighteenth century, whatever organizations may have existed among various categories of artisans in the western Deccan they could not properly be called guilds: tailors, for instance, as mentioned above, could not solve their internal disputes among themselves, but appealed to the government.[2]

Not all urban artisans were, however, free or independent producers. The weaving industry at least was often dominated by merchants through some sort of putting-out system both in the eastern and western Deccan. The weavers were often poor, so that they depended on advance of capital by buyers, who could thus dictate the nature, quality and quantity of the goods produced.[3] The British and the Dutch often adopted the same system on the coasts.

It is not known whether during the period under review the manufactory system of production was prevalent in the up-country cities and towns of the Deccan, as it was found in weaving and iron industries in some regions during the nineteenth century (e.g. towns of the southern Maratha country).[4] But during the seventeenth century, if not the eighteenth, the British of Bombay adopted the manufactory production of cloths at their warehouses in the island, and the Dutch also did the same in weaving, iron and steel manufacturing on the Coromandel.[5] Even though this type of industrial organization was widely found in the medieval Deccan, it is not certain whether this could have later developed into the modern factory system of production, for the latter would require many more factors such as the application of scientific inventions, the technological innovations, and industrial capital distinct from commercial capital.[6]

The wages paid to the artisans and labourers must have fluctuated considerably due to the changes in the price of consumer goods (especially foodstuff) as well as in the demand and supply of labour, although it is almost impossible at present to trace the long-term price trend in the medieval Deccan. At any rate about 1620 it was stated that blacksmiths, goldsmiths and other similar artisans got three pence (approximately 8.4 to 9.6 pice) a day, and their helpers a penny (2.8 to 3.2 pice) or less in the cities of the eastern Deccan.[7] In 1675–6 the British

[1] Fawcett [297], I, 132–3.
[2] Fukazawa [306], 236–7.
[3] Moreland [89], xviii; Jean Baptiste Tavernier [104], (2) II, 318; Gokhale [320], 342.
[4] Fukazawa [307], 530–1.
[5] Fawcett [297], I, 35–6, 79, 165–6; Raychaudhuri [465], 157–8, 168–9.
[6] See: Habib [351], 69–70.
[7] Moreland [89], 27. For the rate of exchange see: Moreland (ed.) [89], 93–4, and Raychaudhuri [465], 224.

in Bombay temporarily raised the daily wage of their labourers (coolies) from 2.5 to 3, to 4 and then 6 pice due to the sharp rise in the cost of living.[1] It appears that the wage scale was slightly higher in the eastern than in the western Deccan, and in the former the nominal wage was raised considerably during the seventeenth century. For during the later part of the century normal annual wage for an ordinary labourer is stated to have been Rs. 60[2] (or about 2.5 annas per day).

In the western Deccan, too, the nominal wage rate seems to have risen to a considerable extent during the eighteenth century. For instance, the tailors employed by the government for making the robes for the Peshwā about the middle of the century were each paid 3 annas a day.[3] And then in 1765–6 peons employed at Nasik mint were paid Rs. 6 each per month (or more than 3 annas per day);[4] wages paid to artisans at the mint is not known for certain, but presumably it was somewhat higher than that for peons.

LARGE-SCALE PRODUCTION

There were several large-scale industries in the Deccan, which were distinct from the ordinary urban industries. These were shipbuilding, diamond mining, and royal factories (*kārkhānas*).

In the eastern Deccan Narasapur Peta near Masulipatam was the centre of shipbuilding during the seventeenth century, because good timber, iron and other necessary materials were abundant there. Hindus, Muslims and Portuguese had their ships built at the yards, and they were often as large as 600 tons.[5] In the western Deccan Kalyan-Bhivandi was the centre of the shipbuilding industry due to the availability of timber. Shivājī, encouraged this industry to a great extent to build up a naval and mercantile fleet. It is stated that 400 ships of various types probably less than 300 tons each were built in his time and organized into two squadrons of 200 vessels. This may be an exaggeration; his warships did not perhaps exceed 200 in number, but he had a strong mercantile fleet as well, that plied between his ports, the Malabar Coast, and as far as the coast towns of Arabia, though it is not clear if this trade was undertaken on behalf of his government, or simply boats were leased out to traders.[6] At any rate this tradition of shipbuilding and naval activities of the Marathas was carried into the eighteenth century, though hardly anything is known about the organizational aspects of the industry.

Perhaps the most famous industry in the 'Ādilshāhī and Quṭbshāhī

[1] Fawcett [297], I, 106, 120.
[2] Richards [467], 140.
[3] Parasnis and Vad [26], II, no. 280.
[4] Ranade [459], 196.
[5] Moreland [89], 36, 63; Sherwani [498], 475.
[6] Sen [486], 158–63.

kingdoms was diamond-mining. The most important mines of the former kingdom were at Raolconda, and those of the latter kingdom were located at Kulur on the Krishna. The mines were leased out by the king to merchants on payment of a certain amount of money, who employed a number of miners, whose total number at Kulur was reported at 30,000 to 60,000, and the town's population at 100,000.[1] Stones of more than 10 carats formally belonged to the king, and one of such diamonds mined at Kulur was the famous *koh-i nūr*. The wage paid to a miner was, however, very meagre; he was paid 3 pagodas per annum, or about R. 1 per month (about 2 pice a day) at the middle of the seventeenth century, though most of the workmen must have been quite unskilled, and they were in the habit of illicitly taking away the stones out of mines.[2]

The most remarkable form of large-scale production in the medieval Deccan as in other parts of India was the many *kārkhānas*, established by kings at their capitals to manufacture and store arms, ammunition, robes, furniture, ornaments and so on, as well as to construct the buildings, which were all required by them and their nobles. As they were not meant for commodity production, they did not always represent the general industrial development of the country; but they certainly indicated the technical skills and organizational sophistication of the age.

In Golconda, for instance, Quṭbshāhī kings used to collect excellent workmen, who included a number of workers on precious stones and were kept too busy at the *kārkhānas* to do any work for anybody else.[3] High standard of skill at the *kārkhānas* was symbolized by the famous cannon called *malik-i maidān* produced at Ahmadnagar, although the organization of such royal factories as well as the method of recruitment of workers is not at all clear for the seventeenth century.

During the eighteenth century many of the *kārkhānas* of the Maratha government seem to have been worked by means of forced labour (*vethbegār*) of artisans of different kinds. For the construction of government buildings a certain number of carpenters, brickmakers, masons, and bricklayers were requisitioned from the districts and sub-districts for the period of eight to fifteen days per annum. Similarly, government stables acquired necessary labour through forced service of leatherworkers, ropemakers, saddlemakers and so on from various regions for fifteen days to two months a year. These forced workers were, however, sometimes paid a small amount of cash or grain.[4]

One is tempted to speculate if the *kārkhānas* might not have moved in the direction of mechanization and become the state model factories

[1] Moreland [89], 31–3. Also see: Tavernier [104], (2), II, 319–30.
[2] Sherwani [498], 471–3.
[3] Sen [109], *Indian Travels of Thevenot and Careri*, 138.
[4] Fukazawa [309], 123.

for the modern industrialization of India, had they not been terminated by the British conquest of the country.

3 South India

In south India, as in other parts of the country, handicrafts were based almost exclusively on manual labour and development of professional habits. Technical improvements in the implements are not traceable. Technological improvements were to a great extent checked by caste rules, which fixed the methods of work. Natural sources of energy (for instance, water and wind power) were not used. To a very limited extent charcoal (in metallurgy) and cattle power (in oil-pressing and some other industries) were used.

Non-agricultural production demonstrated a great variety of forms of economic organization and of methods of integration into the macro-system of the economy. The classification given below is relative as there were no water-tight compartments. The two main kinds of handicrafts were, first, 'natural' and, second, market-oriented ones.

The first included the domestic crafts inside the agricultural families, inter-community professional crafts which met the demands of a narrow locality; and the manufactures attached to the chiefs' courts.

For example, at the Golconda court guns, muskets, expensive arms and cloth etc. were produced.[1] These workshops were natural in the sense that they were concerned with the immediate consumption of the court, the nobles, the army and not connected with the market. The labour in such workshops might be compulsory to some extent. It seems that this form of production did not develop much in south India which may perhaps be explained with reference to the limited resources commanded by the south Indian rulers in comparison with the Mughal emperors.

A part of non-agricultural production was not separated from agriculture and was an additional calling of the agricultural families. Women and sometimes children from all castes except the brahmanical ones usually did the cotton-spinning. Partially home-weaving for family consumption also survived. Home-spinning and weaving could be completely 'natural' (with the use of cotton cultivated in the same household), or partially connected with the market (through purchase of cotton and selling of surplus thread). They could be a 'home industry', when the wives of agriculturists spinned mainly for sale which gave the family an additional income.[2]

'Natural' to a very great extent were also the relations between

[1] Sarkar [476], 194.

[2] Records of Fort St. George [35] (1912), Sec. IV, 59; Buchanan [242], I, 218; II, 263; III, 317; Wilks [546], I, 118.

agriculture and the professional inter-community crafts. They had the form of 'mutual' service, and later on received the name of the '*jajmānī* system'. This system meant that the requirements of the rural population in certain goods and social services were met by a staff of professionals, who were remunerated not with the payment for the work done, but summarily with a fraction of gross agricultural produce (*āyam*, *merah*, *arthāyam*) and/or with a parcel of land (*mānya*, *inām*, *bhūyam*) free from taxes or bearing a reduced tax. The artisans were considered as servants of a collective of fully-empowered members of a rural community. Socially they were as a rule lower than the landholders. The fulfilment of their obligations as well as their maintenance collectively by a community were considered social duties.

Within such a system functioned a section of blacksmiths, carpenters, coppersmiths, potters, goldsmiths and silversmiths, tanners, washermen, barbers. They were spread over the villages in definite proportions (one professional person sometimes was attached to several villages) and tied by the whole set of economic and social relations to the locality and the limited requirements of its population.

The '*jajmānī* system' was spread rather widely and at least up to the British conquest showed no sign of decay. The detailed information on the functioning of the system in the period under review and later is available from Andhra, Tamilnadu, Mysore, Karnāṭaka.[1] It is not quite clear if this system prevailed in Kerala. In the beginning of the sixteenth century, D. Barbosa wrote that in Malabar the blacksmiths, the carpenters and the goldsmiths were paid not only in kind but in cash also,[2] which might be an evidence of some deterioration of the system of collective maintenance of artisans at that period. But up to the end of the nineteenth century one sees in Malabar the settlement of these and other artisans in villages;[3] the service lands of village servants (*adima*); dues in kind for the astrologer, the carpenter, the goldsmith, the musician, the midwife, the barber;[4] and the idea of a monopoly of an artisan on the service for the population of a village.[5]

The detailed description of the '*jajmānī* system' is beyond the scope of this chapter, as the system was spread all over the Indian territory and for a considerable period. It is necessary here only to point out some of its features which usually attract less attention.

All village artisans and menials together with the community administrative staff were known by the common appellation of *āyagars* ('the receivers of the *āyam*') and in some situations they appeared as

[1] Sastri and Venkataramanayya (eds.) [21], III, 310–13; Naidu [432]; Buchanan [242], I, 265–7; II, 104–110; Marshall [409], 57; *Minutes of Evidence taken before the Select Committee on the Affairs of the East India Company* [414], 371, 373, 422; Sherwani [495], 140.

[2] Barbosa [81], II, 58.

[3] Aiyar [207], 13.

[4] Logan [394], II, clxxiv.

[5] Panikkar [444a], 152.

a kind of council of representatives of all the castes living in a village. In this role the *āyagars* might be a collective witness to transference of land, 'election' of the headman, and so on.[1]

In ritual hierarchy, the village artisans and menials belonged to castes lower than that of the *mīrāsīdārs*, i.e. landholders. Their social inequality was seen, for instance, in the fact that for most of them, settling in the central part of a village (the *nattam*) was forbidden. Each of the servile castes had its own ward or hamlet (*cheri*). The social disparity was often added to economic exploitation. Members of the lower castes of the *āyagars* worked on the fields of community landholders without separate remuneration.[2]

The system of inter-community natural unity of crafts and agriculture was sufficiently flexible to survive for a long time. The caste uniting artisans of similar occupation over a vast region was an active social institution at that time. In case of the appreciable disproportion between local demand and supply for a certain service the corresponding caste could redistribute their members over the region to meet the demand. A series of inscriptions of the sixteenth century from Cuddapah district might illustrate this. A group of goldsmiths redistributed among themselves privileges and receipts in eleven villages.[3]

The flexibility of the '*jajmānī* system' meant also that the artisans working under it were not completely cut off from the market. They might sell outside the village the surplus goods left after the fulfilment of communal obligations.[4] Pavlov, using material from nineteenth-century Maharashtra and Gujarat, came to the conclusion that in the '*jajmānī* [*haq*, *baluta*] system' were included mainly those kinds of work of the community artisans which were directly complementary to the agricultural production. But goods for personal consumption were produced by the same artisans for a separate piece-rate payment.[5] It is possible that in the south the economic relations between the *āyagars* and the landholders combined the features of natural and commodity production.

The second great category of crafts, namely commodity production, may be divided into two more or less distinct parts. One catered for the narrow local market and produced mainly low-quality coarse goods. The other was geared to a wider market including the external one and, in particular, met the demand of the upper strata of society. This part of commodity production was characterized by more diversification and division of labour and more dependence on merchant capital. These two

[1] *Annual Reports on Epigraphy* (below – *ARE*), C.P.19 of 1916/17.

[2] Dubois [290], 63.

[3] *ARE*, 209, 237, 238 of 1937/38.

[4] Sastri and Venkataramanayya [21], III, 313; Marshall [409], 148; Buchanan [242], I, 40, 424; II, 362–3.

[5] Pavlov [445], 57–68.

kinds of commodity-producing crafts may be described as 'rural' and 'urban' though by 'urban' crafts one must understand not only those concentrated in the cities but also city-oriented production in suburban areas and some others (e.g. metallurgy) situated rather far from the cities.

Numerically the most important branches of 'rural' commodity-producing crafts were weaving and oil-pressing. There were as well, crafts connected with cloth production, i.e. cotton-carding, thread-dyeing and cloth-dyeing.[1]

It is also necessary to mention the production of hemp thread and sackcloth,[2] carpets and blankets (by the pastoral castes)[3] and salt production.[4]

The level of market-orientation and division of labour in the rural crafts might vary. Some weavers, for instance, worked for orders having been supplied by the consumer with yarn and piece-rate payment.[5] Some others purchased yarn themselves and sold cloths at a market. Sometimes weaving and dyeing were two different occupations, but a weaver also dyed the yarn he used.[6]

The weavers, the oil-pressers and some other kinds of artisans were rather evenly spread over the country, as is indicated by the caste-names used in the inscriptions. These groups of artisans marketed their products at the local bazaars: this happened once or twice a week in each large village. There was a tendency towards a certain concentration of crafts in larger villages, around the famous temples and in small towns. Some epigraphs of the period are in fact grants aiming at attracting the weavers, the oil-pressers and merchants to these towns.[7] The temples with the same aim granted to the caste-leaders of the Kaikkolas (weavers) considerable social privileges, particularly the right to participate in the temple management.[8]

There was a certain regional specialization of crafts. The Coimbatore region, where cotton was one of the main cash-crops, was famous for the production of cloth for common consumption.

Urban crafts were developed in India from the ancient period and distinguished by the high quality of goods. Indian artisans achieved high artistic skill especially in textile production. Indian cotton cloth for long found a ready sale in south-east Asia, Africa, etc. In the seventeenth

[1] Buchanan [242], I, 206, 214, 216, 222, 224, 418; Ramanayya [458], 305.
[2] Buchanan [242], I, 226.
[3] Buchanan [242], 78.
[4] Ramanayya [458], 205, 306.
[5] Buchanan [242], I, 217–8.
[6] Foster (ed.) [31] (1618–21), 192–5; (1630–3), 21, 71; Buchanan [242], I, 263; II, 209.
[7] *ARE*, 454 of 1916 (1513); 107 of 1941/42 (1552); 133 of 1941/42 (sixteenth cent.); 357 of 1939/40 (1563); 310 of 1916 (1676); 296 of 1939/40 (1730); *South Indian Inscriptions* [55], IX, Part II, 531, No. 516 (1525).
[8] *ARE*, 346 of 1923 (1563); 356 of 1912 (1533); 218 of 1931 (1601); 452 of 1913 (1532).

century in connection with the penetration into India of the British and Dutch merchants and the foundation of the European trading factories on the coast, the trade of India with the surrounding countries widened and the direct export to Europe began. Textile industry now had more possibilities for expansion. The concentration of textile workers in the sea-ports of the Coromandel Coast was enhanced. As a result the urban population in general increased and other urban crafts flourished.

For instance, Masulipatam developed as a large manufacturing centre. In the seventeenth century it was mainly a city of weavers and dyers.[1] Around it and 'along the whole Coast' numerous small artisans' settlements sprang up in which weavers, producers of natural dyes, cloth-printers and cloth-painters lived[2] and which constituted an economic entity integrated with the sea-ports.[3] Madras also became an important textile centre.

The level of specialization in the 'urban' crafts was considerably higher than in the rural ones. Here the weaving of cloth of different sorts – spinning, printing, dyeing, painting, bleaching – were always different and distinct occupations. Specialized to the same extent were the production of arms and some other industries.

The majority of urban artisans were commodity producers. Two forms of bondage were imposed on them: socio-political coercion and fiscal exploitation connected them with the feudal system. On the other side production for sale and the economic risk inseparable from this induced unequal relations between crafts and merchant capital, and the exploitation of artisans through economic means.

Feudal exploitation of crafts was manifested in taxes taken from looms, oil-presses etc.,[4] in forced labour for a local official or a chief, in undisguised looting of artisans' earnings, in the supply of goods 'on credit', etc.[5]

Production for the distant external markets necessarily led to the appearance of an intermediary wholesale purchaser, who regularly purchased the goods, gave advances for the future produce, sometimes provided them with raw materials and finally reduced them to a dependent position. The system of advance contract is described in detail in the European sources, as the Dutch and the British themselves took an active part in the cloth trade and were interested in the system of textile production and marketing. The most thorough analysis of these data was made by A. I. Chicherov.[6] Some of his conclusions will be reproduced here.

[1] Olafsson [100], II, 458.
[2] Moreland [89], 18, 35, 55, 61, 79; Bowrey [106], 105–6; Hamilton [111], I, 370.
[3] Moreland [89], 63; Bowrey [106], 72.
[4] Ramanayya [458], 203–4.
[5] Moreland [89], 27; *ARE*, 494 of 1906 (1961/2).
[6] Chicherov [270], 159–81.

The subjection of crafts to merchant capital was widespread. Practically all the artisan settlements along the Coromandel Coast were under the control of one trader or another. In the seventeenth century the biggest of them was Kasi Viranna, who had 'in his hands all the coast from Madras to Armagaon except Pulicat'.[1] Weavers' settlements of this region were known as 'the Viranna villages'.[2] They were divided into eighteen districts, each under 'five of his servants'. In cases of this kind the coercive power over the artisans was economical and administrative at the same time. The merchant appeared in some respects as a suzerain over the artisans. Himself a very cruel exploiter, Viranna at the same time could to some extent save the artisans from the officials' extortions. The similarity between the trader's and the landlord's power over the artisans was especially stressed when the traders[3] in the same manner as the landlords[4] gifted the dues from the weavers to the temples.

The buyers, having tried to mobilize the artisans' labour for their profit, used the uneconomic methods of compulsion as well but the trader-artisan relationship was not purely feudal. The aim of production was marketing. As a result the quality of goods had a great importance. Some degree of personal interest of the producer in the production process was necessary under these conditions. As the dependent weavers were practically deprived of the means of production (though formally the looms remained their property) and received not the earnings but wages, the trader–artisan relationship contained some capitalistic features. In this connection it is interesting that in 1676 a section of the traders 'had raised the wages of their weavers to get a better quality of cloth'.[5]

But the capitalistic features in the relationship were closely interwoven with the pre-capitalistic ones, i.e. with caste solidarity (if the buyer was of the same weaving-caste) and extra-economic compulsion.

All the above-mentioned forms of economic organization of crafts functioned inside the social system of occupational castes.

Even the inter-community artisans – economically almost unconnected with the world outside a village – had broad social contacts. The Kammalan caste in Tamilnadu (the Panchala caste in Andhra) which included artisans of the five basic 'intercommunity' specialities, i.e. the blacksmiths, carpenters, coppersmiths, stone-masons, goldsmiths and silversmiths, had firm and active organization and were a social force in the country. The Kammalans of extensive regions sometimes met together to make collective grants to the temples.[6] The violations of their social rights provoked very sharp protests from their side, usually

[1] Fawcett [297], II, 146.
[2] Carré [105], II, 605.
[3] Ramanayya [458], 311 (inscription of 1536).
[4] *ARE*, 433 of 1940/41 (1544).
[5] Master [32], II, 147.
[6] *ARE*, 8 of 1942/43 (1752).

in the form of mass migration of the artisans of one speciality or of the Kammalans of the locality as a whole.[1] Abbé Carré in the seventeenth century pointed out the peculiar cohesion among Kammalans: 'If one of them is offended or wronged, all the others shut their shops and abandon all their work.'[2] The caste support served as a sort of safeguard of rights even for the lowest of the community servants such as a *vettiyan* (a sweeper).[3]

Several inscriptions of the seventeenth century contain rules restricting contacts (interdining and intermarriage) between the sub-divisions of the Kammalans. This growth of disunity among the previously solidary caste was not unrelated to the influence of the state authorities and the temple administrations.[4]

Rather powerful in the south was the weaver caste of the Kaikkolas. Struggling for their social rights, the Kaikkolas also sometimes abandoned their settlements and stopped production. Significantly enough they collaborated on such occasions either with the local organizations of the agricultural castes[5] or with the Kammalans and other professional castes.[6] As donors of dues to temples also they not infrequently combined with other artisan and trading castes.[7]

The artisan caste in a city had even more cohesion as the caste ties here were strengthened by territorial ones. Members of a caste were concentrated in a narrow space occupying usually a ward of a city, and often had their own temples.[8] Mutual support enabled the artisans of a city to retain the traditional privileges and even behave 'disrespectfully to their superiors'.[9]

The weavers and other artisan castes in Madras city several times came into conflict with the British authorities on questions of taxation and showed considerable unity.[10] Caste solidarity helped the weavers to secure better terms even from the merchants who supplied cloth to the European Companies.[11]

Division of labour had been developing in India in the form of caste differentiation. In the period under review the process went on mainly along the same lines. At the end of the seventeenth century D. Havart wrote that in Palakollu 'there are four kinds of painters each with a special family name. Among them are divided the orders.'[12] The orders were for painting cloth according to musters provided by the merchants.

[1] *ARE*, 192 of 1932/33 (1522); 493 of 1937/38 (1573).
[2] Carré [105], II, 595–6.
[3] *ARE*, 421 of 1924 (1802).
[4] *ARE*, 309, 378 of 1916.
[5] *ARE*, 318 of 1916 (1596); C.P. 8 of 1921/22 (1556).
[6] *ARE*, 201 of 1936/37 (1542); *SII*, IX, Part II, 575 (1533).
[7] Burgess [45], 90 (1702).
[8] Sewell [491], 256 (1900 edn).
[9] Fryer [107], I, 82.
[10] Wheeler [544], 14–17; Irwin [372], 20, 29.
[11] Raychaudhuri [465], 64, 147.
[12] Cited in: Irwin [371], II, 30.

It seems that the local painters' community was divided into sub-castes according to the kind of pattern they painted.

In the urban crafts there were also more complex forms of organization in which the caste relations were less important. Most important among these were the workshops employing hired labour.

Of the existence of the weaving workshops we have indirect but convincing evidence. For instance in 1525 when a new bazaar in Velpamadugu (Anantapur district) was founded some new rules of taxation were introduced. One of these rules was: 'If ten looms [*magga*] are kept by a single family, only nine are to be taxed.'[1]

According to F. Buchanan, in the early nineteenth century the members of the weaving-sub-caste of *padma-shalay* rarely used hired labourers and rarely hired themselves out. Their workshops were based on family labour. But the members of the *samay-shalay* sub-caste usually hired from two to five 'servants', who were paid 'by the piece'. Labourer-weavers were often in debt to their masters, so their labour was not completely free.[2] On the other hand, the master-weaver was sometimes in debt to a merchant buyer. The profit derived from exploitation of hired labour possibly went to a merchant and not to an organizer of a workshop.

Workshops with several hired labourers existed in some other branches of manufacture as well. Manufacture of glass bangles, oriented to an extensive market, is an instance in point. Up to seven persons were occupied in a workshop; among them there was some division of labour. But such workshops, it seems, had no employers and were based on the family or other traditional kinds of cooperation.[3] Carpet workshops using child labour existed in Golconda.[4]

Economically the most important and organizationally and technologically the most developed industry was shipbuilding. The largest shipyard was at Narasapur.[5] Lesser ones were at Masulipatam and Pulicat.[6] On the western coast ships were built and repaired in Cranganore and Cochin.[7] In contrast to northern India the shipyards in the south were mainly private.

The wood for shipbuilding was floated to the coast down rivers. Metal parts (spikes, bolts, anchors) were produced locally. Rather complex technical devices were used – four-fold tackles, systems of moving blocks, crabs, etc. From fifty to a hundred persons were employed at each yard. Among them are mentioned carpenters, caulkers, sailors (lascars), general labourers (coolies), etc. The employees at the shipyard almost certainly included blacksmiths.

[1] *South Indian Inscriptions*, IX, Part II, 531, No. 516.
[2] Buchanan [242], I, 212, 217.
[3] Buchanan [242], I, 147–51; III, 369–70.
[4] Master [32], II, 171.
[5] Floris [91], 102, 105, 126–8, 179; Bowrey [106], 102; Moreland [89], 63, 80.
[6] Raychaudhuri [465], 149.
[7] Cabral [82], 105; Barbosa [81], II, 93.

The quality of ships constructed according to European standards was indeed high. In the second half of the seventeenth century the Dutch and the British repaired their ships and built the smaller ones at the shipyards of the eastern coast.

Diamond-mining hardly had any economic importance but the enterprise attracted capital and employed hired labour on a large scale.[1] Some diamond-fields were under the direct management of officials. Tavernier said that 6,000 persons worked under the officials.

Other fields were farmed out to rich merchants. They paid for the land and also a poll-tax for the labourers hired. Besides the merchant was obliged 'to sell' the largest stones to the king for low prices. The merchant was supervised by a special government official.

State-feudal exploitation of diamond-fields was expressed also in excises as a result of which the cost of food in the vicinity of the fields became higher by half, and of betel and tobacco two to three times. The persons connected with mining were not allowed to stay outside the territory in which these excises were in force. Besides, a 2 shilling custom duty was paid for the stones sold.

The farmer leased the field in small parcels to sub-farmers who hired ten to a hundred persons. In Kollur alone not less than 30,000 men worked each day.

The period of lease was counted in days and even hours. Therefore the employers were interested in hurrying up the work. This is why they employed labourers in such large numbers and introduced minute division of labour even though the technology was very simple.

Mining, widespread in Golconda, Carnatic and Mysore, was also an example of large-scale production for those times. Golconda steel was famous all over India.[2] Mysore iron and steel were not of the same high quality and were used mainly for ploughshares, horseshoes, nails etc. for local consumption.

Among the metallurgical workshops some were based on cooperation of producers and had no employer in the proper sense. But there were other workshops as well where the main means of production belonged to a master who received a profit clearly distinguished from the wages of the labourers.

In some iron-foundries profits and wages were expressed in kind, i.e. in iron bars, which were sold in the market by the labourers themselves. In others the labourers received payment in cash.

The level of technical equipment at all the ironworks was roughly the same. Iron was produced in small and rather primitive furnaces. The method of blowing did not create sufficient heat to smelt the ore. The

[1] Sewell, ed. [491], 388; Sen [103], 142–3; Crooke [104], II, 46; Bowrey [106], Master [32], I, 172–5; Moreland [89], 32–3.

[2] Moreland [89], 34, 36–7; Crooke [104], I, 124.

process was similar to that which is in vogue among primitive tribes. Nearly twenty men were employed at one furnace. Hired labour, as in other workshops of that time, was very often combined with debt-slavery and an employer was often in debt to a big trader.[1]

The European trade on the coasts of India led, *inter alia*, to the establishment of printing and bleaching workshops at the European factories.[2] But these new workshops were based on the existing technology, on the traditional methods of hiring (through the intermediary *sardārs*, by getting the workers into debt) and therefore these workshops did not introduce any significantly new elements in the country's economy. In any case they could not play any very important role, as their number was very limited.

The economic system of India, based on small-scale production and the social inequality and dependence of the producer, in the course of its development generated a multiformity of industrial production from the natural inter-community handicrafts to the comparatively large and mass production for a wide market. But all these forms remained within the limits of the traditional system which was not disrupted either by the activity of native capital or by the penetration of the foreign merchant capital.

[1] Buchanan [242], I, 29–31, 170–7; II, 16–38, 138–140; III, 361–7. For the analyses, see: Chicherov [270], 200–7.

[2] Master [32], I, 41, 115–16, 164; Foster [31], (1630–3), 231–5; Foster [30], II, 127–8.

CHAPTER XI

INLAND TRADE

Production and distribution of economic goods in India was based on the co-existence and, at times, inter-penetration of a subsistence and a commercialized sector. As the bulk of the population lived in the villages and the bulk of their needs for goods and services was satisfied through production for use and a network of reciprocal obligations, exchange acounted for a relatively small proportion of economic activity. Yet exchange of goods, found at virtually every level and sphere of economic life, was impressive in its magnitude and complexity. The dominance of subsistence-oriented production was modified by surpluses and deficits necessitating multi-tiered and multi-faceted commercial activity.

The rural market was very much a feature of the intra-local trade of the period. 'Even in the smallest villages', wrote Tavernier, 'rice, flour, butter, milk, beans, and other vegetables, sugar and other sweetmeats, dry and liquid, can be procured in abundance.' In the large villages, usually under a Muslim official, sheep, fowl and pigeons were on sale, while in exclusively Hindu villages one could find 'only flour, rice, vegetables and milk'. It was not necessary, Tavernier added, 'that those who travel in India should provide themselves with food beforehand' and described how he found a band of 4,000 pilgrims travelling without any prior arrangements for food supply. Other travellers confirm this account of abundant food purchasable everywhere.[1] In Bengal – our literary evidence suggests – the good raja or *zamīndār* was expected to establish markets for the periodic *hāṭ*.[2] Streynsham Master noted that in Bengal in some places there were 'two, three or more markett dayes in a week'. A distinction was made between the bazaars which were mainly retail markets and the *maṇḍīs*, or wholesale markets, in the countryside. The merchant Banārasīdās mentions in his memoir that each of Jaunpur's fifty-two *parganās* had a bazaar and a *maṇḍī*.[3] Epigraphic evidence from south India shows the wide range of commodities – foodgrains, vegetables, fruit, butter, salt, pepper, cotton, thread,

[1] Tavernier [104], I, 38, 238.

[2] See *Chaṇḍīmangala*, 107.

[3] Master [32], I, 325; *Ardhakathānak*, (trans.), I, 53.

fabrics, metalware etc. – offered for sale in these markets. The Bengali literary sources provide a much more extensive and varied list including varieties of fish, meat and dairy products, live animals, (the vegetarianism of north Indian Hindu villages noticed by Tavernier evidently had no hold on Bengal), spices, oil, *ghī*, camphor, conch shell and lime.[1]

The intra-local trade of the towns and cities was necessarily more complex and varied than that of the countryside. To quote Tavernier again, 'It is the custom in India, when they build a public edifice, to surround it with a large market-place.'[2] As a result, most major towns had several markets or bazaars, one of which was the chief or 'great' bazaar. At Surat, for instance, between the custom house and the mint was 'a crowded *Buzzar* of all those who came to sell and buy Cloath'; further on were 'the High-Streets, with Shops on each side, not like ours in *Europe*', wrote Fryer, 'being more like Pedlers-Stalls; we crossed several *Buzzars*, which yielded sustenance to many mouths'.[3] Surat's great bazaar was outside one of the city gates, while at the entrance to the green was the market for horses and cattle. At Hugli's 'great bazar all sorts of commodities' were sold while there were many other bazaars selling cotton, coarse calicoes, provisions, etc.[4] Describing the Surat bazaars, Ovington remarked that it was difficult 'to pass through the multitude of *Bannians* and other Merchants that expose their Goods. For here they stand with the Silks and Stuffs in their Hands, or upon their Heads, to invite such as pass by to come and buy them.'[5] Among other cities, Goa even in her days of decline had, 'besides innumerable shops for everything', a daily market in the morning where the slaves were sent to offer for sale on behalf of their masters a very wide range of commodities.[6] The commodities on sale, both domestic and foreign, were strikingly varied, a fact noted by all foreign observers. 'You cannott desire any thinge butt you shall find itt in this cittye,' wrote Jourdain of Agra. 'It seems like another Egypt, or to say better, a terrestrial Paradise; such is the abundance of all earthly things,' was Rev. Copland's comment on Surat.[7] Most urban centres had their component of artisans and specialized manufacturers. The producers, like the textile weavers of Benares, often marketed their own products.[8] A very wide variety of foodstuffs including cooked food and sweetmeats were on sale in most urban bazaars, as were textiles, especially cotton fabrics, and the special products for which particular centres were famous. But the bulk of the urban commerce was inter-local rather than intra-local for the commodities on sale in the urban markets were mostly

[1] Chicherov [270], 96. *Chaṇḍīmangala*, 194.
[2] Tavernier [104], I, 52.
[3] Fryer [107], I, 248.
[4] Finch's account in *Early Travels in India* 1583–1619 [85], 135; Bowrey [106], 168.
[5] Ovington [108], 130.
[6] Valentijn, V, ii, 5–6.
[7] Jourdain [86], 164; *Voyages of Thomas Best*, 239.
[8] Tavernier [104], I, 96–97.

the product of other places, near or far. Again, most urban markets not only catered for the needs of local consumers, whosesale and retail, but acted as emporia and entrepôts whence dealers from other places secured their supplies.

A major feature of the inter-local trade was the predominantly one-way flow of commodities from the villages to towns, a corollary of rural self-sufficiency. Such self-sufficiency was, of course, not total, and it is now recognized that the individual village was probably part of a narrow circuit of exchange which encompassed several villages, with the pedlar, the *hāṭs* and the *maṇḍīs* mediating the distribution of commodities. Direct evidence for such inter-village trade for the period prior to the late eighteenth century is, however, extremely scarce. The commodities mentioned as available in rural markets also included items like salt, spices and metalware which were either products of distant places or made of raw material which was not locally available. Still, almost certainly, the economic needs of the pre-colonial village in India were met mostly from its own produce distributed through customary arrangements rather than through exchange. Incidentally, this pattern of economic organization was peculiar to India rather than the whole of Asia, contrary to a still widely-held belief. In China, between about 900 and 1200 informal markets became the focal points of peasant life and 'Chinese peasants from this time on used commercial means to satisfy their needs for the exchange of many of the most basic services...'.[1]

The inter-local trade – both the country to town and inter-town flow of commodities – was essentially a short-distance version of the inter-regional trade. The villages around a town are often described in our sources as being dependent on the latter, implying primarily an administrative relationship; the economic ties between town and country were no less strong. The collection of revenue in cash generated a pressure to sell; the towns, providing the necessary demand, were dependent on the villages for the supply of not only primary products but most of the manufactured goods they consumed. A striking feature of the inter-local trade was the extreme responsiveness of food supply to market demand. All major urban centres had abundant supply of food, a large part of which necessarily came from outside. The case of Bombay is an instance in point. Unable to provide for its population of some 60,000 from its own produce, the city was well supplied with foodgrains and meat at reasonable rates 'from abroad'. The responsiveness of supply even in this relatively inhospitable area is emphasized in Fryer's remark that 'more flesh [was] killed for the English alone here in one Month, than in Surat for a year for all the Moors...'.[2]

[1] Elvin [292].

[2] Fryer [107], I, 177.

Somewhat grim examples of this responsiveness are provided by Mundy in his references to the Gujarat famine of the 1630s. The famine affected western Deccan as well and the crop had failed totally in the area around Burhanpur. Yet, as the king was encamped in the city to conduct the Deccan campaign, its bazaar was 'plentifully stored with all provisions, being supplied with all things from all parts, farr and neere, which otherwise, it may be believed, would feele the same Calamitie with her Neighbouring Townes...'. Near Sironj he saw 'all the face of the earth...covered with greene Corne' and *banjāras* with thousands of oxen laden with provisions on their way to Burhanpur, 'but of all this aboundance poore Guzeratt was never the neere, where there was most neede'. Even in Gujarat, however, at the height of the famine there was no total failure of food supply. In one small town, Navi 'in the middle of the Bazare lay people new dead and others breathing their last with the food almost att their mouthes, yett dyed for want of it, they not haveinge wherewith to buy...the rich and stronge engrossinge and takeinge perforce all to themselves'.[1] Very similar accounts of food supply during famines are available for other parts of the country as well. In 1670, for instance, while famines led to many starvation deaths in Patna 'the Nabobs Chiefe Wife had Several large Storehouses full of graine, and would not dispose of any' for less than the equal weight of silver for rice or wheat'.[2]

Different types of 'producers' goods' featured prominently in the inter-local exchange of commodities. Raw material for textile manufacture in the towns – cotton, wool, silk cocoons as well as dyestuff – necessarily came from the countryside. In Gujarat, Broach and Mahmudabad developed as centres for the production of yarn, whence other urban and, presumably, some rural centres as well, were supplied. Wood for the furniture manufactured in the towns of Kashmir and Gujarat came from the forest areas. Kasimbazar imported ropes to bind silk bales from the neighbouring township of Sherpur.

Some towns developed as markets for particular products procured through the inter-regional or even overseas trade. Belgaum and Goa, for instance, had a large trade in precious stones: miners and merchants went to Goa to 'sell the best' because of the freedom they enjoyed there from the rapacity of princes and nobles.[3] There are instances of such localized markets being encouraged by official policy. To increase the population of an Ahmedabad suburb 'it was so arranged that different kinds of aromatic roots and drugs – imports from Surat – should be sold here free of excise duty'.[4] An urban manufacturing centre like

[1] Mundy [96], II, 49, 50–1, 56.
[2] Bowrey [106], 226–7.
[3] Tavernier [104], II, 95; Fitch [84], in *Early Travels*, 15.
[4] *Mir'āt-i Aḥmadī* [167], (Supplement, trans. 13).

Malda regularly exported its products to other towns and cities in the area as well as to more distant markets. Such centres were often places of considerable trade and attracted buyers from neighbouring places. To Velapalem in the Krishna district, for example, people from Masulipatam and other places came to buy its famous calico.[1] The great emporia like Hugli or Masulipatam acted as markets for an extensive area. The textiles produced in the Madapollan-Palakollu region, for instance, were 'for the most part carried to Metchelipatam and vended there, that beinge a Great Bazar to these parts for above 100 miles in circuit'. Similarly, the products of Orissa, Bengal and Patna were brought to Hugli and daily sold in the city's main bazaar.[2] Part of the speculative buying at such emporia were evidently for purposes of inter-local commerce: at Surat, wrote Ovington, 'all commodities are vendible, though they never were there seen before. The very curiosity of them will engage the Expectation of the Purchaser to sell them again with some Advantage, and will be apt to invite some other by their Novelty, as they did him, to venture upon them.'[3]

The inter-regional trade in the period was not, as has been sometimes suggested, predominantly an exchange of highly-priced luxury products. Despite the heavy expense of land transport – heavy enough to stifle certain lines of commerce[4] – the trade in foodstuff and a wide range of textile products, some of which surely cannot be described as luxuries, were the most important components of the inter-regional trade of the period. The waterways, both inland and coastal, were cheaper and therefore preferred: much of the inter-regional trade was, in fact, coastal. But the volume of trade along the land routes – with the two inland emporia of Agra and Burhanpur as their nodal points – accounted for a high proportion of the total. While virtually every part of the sub-continent contributed to this commerce, it was clearly dominated by certain regions. The exports from Bengal, of primary products as well as manufactured goods, were evidently in excess of the region's imports. The coast of Coromandel, dealing both in its own produce and imported luxuries, had a brisk trade with the west coast and Gujarat both along the coast and across the Deccan; its trade goods also travelled north via Burhanpur. Luxury textiles, including silk (mainly for the north Indian market centred on the Mughal court), various imported items and cotton were the main exports of highly commercialized Gujarat to other parts of India; in exchange she received foodgrains and intermediate products for her manufactures. Along the

[1] Master [32], II, 135.
[2] Bowrey [106], 106, 168.
[3] Ovington [108], 131.
[4] Multan's trade, for instance, suffered heavily when the channel connecting the city to the Indus was silted up in places and as a result its products had to be carried by the overland route.

coast, there was a brisk exchange of commodities over short as well as long distances. Malabar's trade in pepper featured prominently in this exchange. The north Indian heartland, so far as one can see, was predominantly an importing area. Its major exports to other parts were foodgrains and indigo, besides items like salt and the luxury products of Kashmir which were parts of the region's entrepôt trade. Punjab and Sind seem to have constituted a commercially integrated area with the Indus providing a lifeline for commerce. The region's trade links were as much with trans-Indian territories via Kabul and Kandahar as with Delhi and Agra. Some of its products also passed from Multan to Surat overland, partly for purposes of export to other areas.

The trade in foodgrains indicates the existence of surplus and deficit areas and contradicts theories which postulate a uniform pattern of self-sufficiency for the entire sub-continent. We do not know if any of the inter-regional flow of foodgrains was meant for the rural consumers. Urban consumers in the deficit areas, both rich and poor, were evidently dependent for at least part of their requirements on 'imported' food. At Mirjan, near Honavar in Kanara, Barbosa saw the traders from Malabar purchase 'a great store' of very coarse black rice for very poor people.[1] It is possible, but unlikely, that such poor people were exclusively urban.

A major source of foodgrains for deficit areas was Bengal. The cheapness of foodstuff in the province was not merely the result of inadequate supply of specie, as Moreland suggested: the abundance of all varieties of food in this province impressed observers without exception. Bengal rice was sent up the Ganges to Agra via Patna, to Coromandel and round the cape to Kerala and various port towns on the west coast, while Agra secured some supply of wheat as well from the eastern provinces – probably the product of Bihar. Further to the north-west, wheat and high-quality rice were exported to Lahore from Muradabad and Sirhind respectively. An interesting aspect of the trade in foodgrains was the exchange between surplus areas. The export of rice from Bengal and Orissa to Coromandel is explained by the relative cheapness. Part of the supply to Masulipatam might have reached southern Coromandel, a deficit area. Bowrey's statement regarding the export of grain from Patna 'to such a plentifull countrey as Bengala'[2] probably refers to particular varieties of high-quality rice or wheat. Gujarat with her large manufacturing and commercial sector and famine-prone agriculture was the chief importer of foodgrains. The region received its supply of wheat and coarser grains from Malwa, Rajputana and northern India via Agra. Rice came from the Deccan and even Gondwana and by sea from Malabar. The trade in foodstuffs

[1] Barbosa [81], I, 185. [2] Bowrey [106], 226.

included butter and oil. In Bengal, butter, wrote Fryer, 'is in such plenty that although it be a bulky article to export, yet it is sent by sea to numberless places';[1] it was also an item in the exports to Agra. Sind also exported some butter through Thatta. Oil from Orissa's 'Gingelly coast' was important in the area's coastal trade. There was also a trade in luxury food which included items like fine varieties of rice and mangoes: the best mangoes in the Delhi market came from Bengal, Golconda and Goa.[2] The export of sugar from Bengal – by sea to 'all India' and by river to Agra and beyond – was of great commercial importance. Sugar was also the chief product of Multan whence great quantities were sent down the river to Thatta and Lahore.[3] The most important item of import into Bengal was salt from Rajputana, of which some 10,000 'tuns' were carried from Agra down the Ganges every year.[4] A quantity of rock-salt from the hills was also exported via Lahore. The volume of the trade in foodstuffs cannot be assessed owing to lack of data, but our sources provide some indication of the magnitudes. Manrique mentioned over a hundred vessels 'yearly loaded up in the ports of Bengala with only rice, sugar, fats, oil, wax', etc.[5] The *Banjāras* who organized the transport of foodstuff by land on pack-oxen, had in their larger camps or *ṭāṇḍās* anything between 12,000 and 20,000 bullocks capable of carrying 1,600 to 2,700 tons. Besides catering to the needs of the regular annual movement of goods, they supplied the imperial army during campaigns. Mundy on his journey from Surat to Agra found thousands of bullocks carrying food to the imperial camp at Burhanpur while others were returning unladen to carry back more: evidently the trade could deal with sudden increases in demand and the *ṭāṇḍās* meet the increased demand for transport.

European traders procuring textiles frequently noted that their purchases accounted for a mere fraction of the total trade, the bulk being bought up by Indian and other Asian merchants for other parts of the sub-continent and the overland trade to west and central Asia. The major varieties of cotton textiles and the localities where these were produced have been discussed in another chapter. Our evidence clearly indicates that none of these was exlusively meant for local consumption or the foreign market. Virtually every part of the country had some varieties of textiles to export to other parts. The cotton fabrics offered on the market covered a very wide spectrum pricewise and were hence evidently meant for different categories of purchasers. The famous *chit* could cost anything between Rs. 16 and 60 the *corge* of twenty pieces. Lahore produced the coarsest and cheapest varieties. The price of *bāftas*

[1] Fryer [107], II, 41.
[2] Bernier [102], 249.
[3] De Laet [93], 78.
[4] Jourdain [86], 162.
[5] Manrique [98], I, 56–57.

similarly ranged from Rs. 2 to 40 the piece. The *chhīnṭ* from Sironj evidently included some cheap varieties for, if we are to believe Tavernier, 'all the common people of Persia and Turkey' were clad in it.[1] In this trade, too, Bengal enjoyed a position of pre-eminence: for silk and cotton, Bernier described Bengal as the 'common storehouse' not of Hindustan or the empire of the Great Mogul only, 'but of all the neighbouring kingdoms'.[2] The countrywide demand for particular lines of textiles is indicated by the presence of traders from Patna and Upper India in the Bihar town of Lakhawar where the white *ambartis* was procured, along with other fabrics made in Malda and Bihar, for sale in Lahore and north-western India generally. Pathan dealers procured *sahan* (fine sheeting) and *ḥammām* (towelling) worth Rs. 250,000 a year from lower Bengal. Bengal, too, imported certain varieties of textiles, e.g. *chhīnṭ* and red *sālū* from Burhanpur.[3] An interesting example of how trade could be affected by changes in transport cost is provided by the experience of Multan, whence quantities of calico used to be carried down the Indus to Thatta before the river mouth was silted up by sand. The carriage of goods from Multan and Lahore to Surat via Agra proved to be so expensive that few went to invest in those two places and their manufactures declined.

If the trade in cotton textiles was confined mainly to luxury and comfort goods, the inter-regional exchange of certain intermediate goods and raw material suggests a more basic pattern of interdependence. The Gujarat silk industry was entirely dependent on the import of raw silk from Bengal which largely supplanted the finer Chinese raw silk in course of the seventeenth century. Large consignments of Bengal silk also went to Agra whence 20,000 to 30,000 bundles were sent yearly to Persia and Turkey. Roe observed – it is difficult to say with what truth – that Bengal silk was available more cheaply at Agra than in Bengal. If true, it would perhaps be due to the fact that the traders from north India controlled the trade in Bengal, so that any procurement of silk against this stiff competition was rendered difficult. When the Dutch began to procure silk from Kasimbazar, they could not get as much as they wanted because of this persistent competition. Bengal also imported an important raw material for her manufacture, viz. 'large quantities of cotton', grown largely between Surat and Burhanpur which came via Agra down the Ganges.[4] The dyestuffs, indigo and chay roots, were produced only in certain regions, but were essential for the textile industry everywhere. We have little information about the inter-regional trade in these commodities, except that the Bengal, Burhanpur and Golconda varieties were 30 per cent cheaper than the Agra variety and

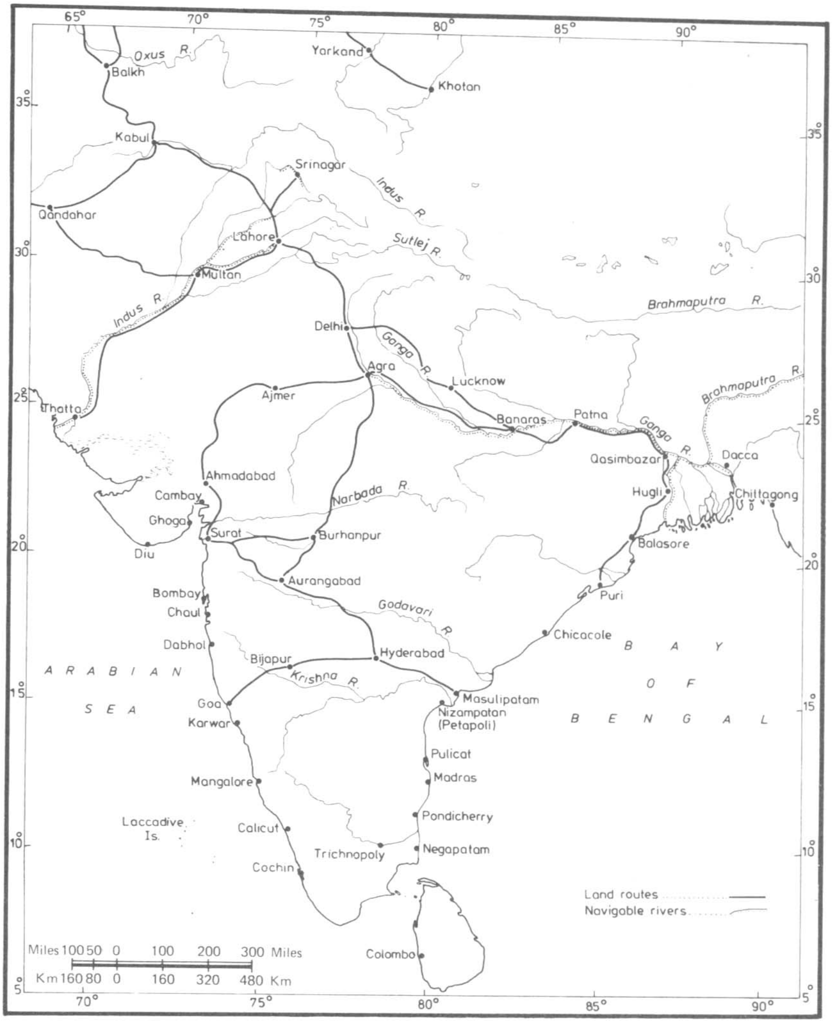
[1] Tavernier [104], II, 4–5; I, 46.
[2] Bernier [102], 435.
[3] Mundy [96], II, 362, 371.
[4] Pelsaert [92], 9.

that the Dutch conveyed more than Rs. 100,000 worth of Bengal indigo to Masulipatam every year, presumably for purposes of export.[1] We also know that cotton fabrics were sent from different parts of the country for washing and dyeing to central spots like Agra, Ahmedabad, Masulipatam and certain places in Bengal in the indigo-growing areas.

The few minerals produced in India were necessarily localized and presumably distributed from these centres to other parts of the country. Again, direct evidence on this point is scarce. We know that India was self-sufficient in iron and that the iron from the Gwalior mines was used to produce 'numerous articles' which were sent to the principal cities of the Mughal empire.[2] The junks sailing from Masulipatam to Bengal carried some iron and the Malabaris imported a quantity of this metal from Bhatkal. Saltpetre was produced in abundance in Agra and Patna and, from the latter place, sent down the river to Bengal which was the principal emporium for its export trade. The data on the trade in diamonds, especially from the Golconda mines, are also plentiful. For the rest, the available information chiefly concerns the distribution of imported bullion from Surat, Masulipatam and Bengal to different parts of the empire.

A variety of miscellaneous items entered into the inter-regional trade of the period. Of these, Malabar's trade in pepper and some other spices like ginger, cardamom, *radix china* and wild cinnamon appears to have been of some importance. Merchants from Bijapur and the Carnatic procured pepper at Cochin and Cananor. Spices as well as areca-nuts, cocoanuts and palm candy were regularly carried in Malabar ships or by Chetti merchants to Coromandel, the Konkan Coast and Gujarat.[3] The trade between Malabar and Gujarat – mainly trade in pepper for opium and cotton – was disrupted when the Dutch established a monopoly over the pepper and opium trade. Bengal received a quantity of opium from Bihar and some tobacco from Masulipatan.[4] Tobacco was produced in abundance at Burhanpur, evidently for export to other regions; in certain years, the peasants allowed as much as half the crop to rot in the field 'because they had too much'.[5] Prominent in the luxury trade of the period were the products of Kashmir – her 'prodigious quantity of shawls' which gave 'occupation even to the little children' and served 'all the Indias', the celebrated crafts – palanquins, bedsteads, trunks, boxes etc. – 'in use in every part of the Indies' and saffron exported to Agra and other parts.[6] Gujarat received lac from Bengal for the manufacture of lacquerware, and Bengal's manufacture of

[1] Tavernier [104], II, 8.
[1] Manucci [110], I, 70.
[3] Baldaeus, (trans.), chapter XVI, 563; Barbosa [81], I, 127–30, 137–9; II, 92–3.
[4] Hedges [33], II, clxxix.
[5] Tavernier [104], II, 19–20.
[6] Bernier [102], 302–3; Finch [85], 169.



Map 9 Major routes and ports, seventeenth century

conch-shell ornaments, of great ritual importance to local Hindus, was based on the import of conch shells from Tuticorin, among other places. This list of miscellaneous items of trade could be extended considerably; it included such exotica as rhinoceros horn from Ajodhya, jasmine oil from Gwalior, the perfumed pottery of Bihar, Ganges water for the nobles as well as more mundane objects, like paper, from Shahzadpur near Allahabad, or pink marble from Rajasthan for the royal buildings.[1]

[1] Mundy [96], II, 63, 98, 241.

Judging by the numbers of slaves and eunuchs in the employ of royalty and nobility, the trade in slaves must have been quite considerable. In Bengal, the Maghs and the Portuguese, in cooperation with Indian traders, organized it on a regular basis and slaves were exported from there to different parts of India. The eunuchs in the Mughal harems, Pelsaert informs us, were 'merely purchased Bengali slaves'.[1]

No evidence is yet available on the volume of the inter-regional commerce either at any point of time or in the secular period. As has been discussed above, individual items of information such as the quantity of salt imported into Bengal, the export of raw silk from Kasimbazar to Gujarat or the number of pack oxen used by the *Banjāras* to transport grain, convey some idea of the magnitude of this trade. There was, in all probability, an upward trend in its volume, though we have no direct evidence to prove that this was so. The likely increase in population, discussed in another chapter, would suggest an increased demand for foodgrains and other foodstuffs unless the increase was concentrated in the food-exporting areas. We know for certain that the volume of exports through the European Companies was steadily on the increase. Wherever we have specific information, it is clear that the Europeans' trade accounted for a mere fraction of the output and 'export' in any given centre of production. Unless the percentage share of the European Companies in the total trade was rising – and there is nothing to suggest that it was – the upward trend in their 'investments' would indicate at least a proportionately upward trend in the inter-regional trend. One should, however, emphasize that such speculation merely suggests a possibility and may be wildly wrong.

The history of prices – still very much a subject of controversy – is discussed in another chapter. Some aspects of that story are, however, very relevant to our present discussion – specifically to the questions of market integration and such secular trends in the economy as were influenced by or reflected in the inter-regional trade. Moreland concluded that commodity prices in India remained remarkably stable in India down to the 1660s. Only there was a change in the relative price of copper and silver – copper becoming expensive over time, and with the increased import of silver into Bengal, silver prices fell, pushing up the general price-level in terms of the silver-based currency. Another minor exception to the secular price stability was the increase in the price of one imported commodity, cloves, explained as a consequence of monopoly.

Moreland's views have been challenged by more recent research. Evidence that prices of foodgrain increased very substantially in Hindustan, the Punjab and Gujarat is incontestable. On the other hand,

[1] Pelsaert [92], 65.

Moreland's view that silver imports had an inflationary effect on food prices in Bengal, bringing the region's misleadingly low prices up to the more 'standard' sub-continental level, has also been disproved: the export of foodgrains from Bengal to the traditional markets along the east coast, Gujarat and regions far outside India's boundaries shows no sign of decline after the alleged equalization of prices. Given the distances and the risks and costs of transport, one must conclude that Bengal continued to enjoy the advantage of relatively low prices.

However, Moreland appears to have been right on one point. He chose Sarkhej indigo as a prime example of price stability. Habib has pointed out that the price stability of this export item – explicable in terms of the competition of west Indian indigo – was in sharp contrast to the record of north Indian indigo which showed a markedly upward trend. It is interesting to note in this connection that of the commodities exported by the English Company from Bengal between 1663–4 and 1719–20, cotton yarn and raw silk had remarkably stable prices, while saltpetre prices increased by about 50 to 67 per cent in the first twenty years of the eighteenth century.[1] Another fact very relevant to this discussion is the persistent inter-regional difference in prices, especially of foodgrains.

Such elusive data do not, of course, allow any firm conclusions. Certain possibilities are, however, suggested. Market integration evidently had not got very far, otherwise export of foodgrains to deficit areas would have pushed up prices in the surplus region, whatever the magnitude of bullion supply. Inter-regional trade, like the international trade of the period, was firmly based on the substantial differences between the procurement and selling prices and ultimately on the relative inaccessibility of the sources of supply. As Moreland pointed out, the difference in wheat prices between Agra and Gujarat absorbed the heavy cost of transport by land and permitted a more than fair margin of profit. Secondly, one wonders if separate markets were merely the result of geographical distances or whether within the same area, price formation of export products was affected by factors which had little bearing on the marketing of commodities for domestic consumption. It is possible that the procurement organization of the European Companies, with their limited control over the production process, had succeeded in reducing costs so that their investments remained unaffected by the secular rise in domestic prices. It is interesting that where they had little control over production, e.g. saltpetre, the procurement price does show an upward trend. In pursuing such a line of enquiry one would of course have to explain how the cost of production could be kept low when the main input was labour and food prices were rising.

[1] Chaudhuri [269], appendix B, table 2.

The phenomenon of price increase also has not been explained adequately. The hypothesis that it was linked to increased import of specie and followed, with a time lag, the trend in Europe, itself linked to the import of bullion from the New World, has not yet been accepted generally. The relevant quantitative evidence is meagre. More important, price rises in the Mughal age were likely to have been caused more by 'real' economic factors than by changes in the volume of money supply. The Mughal revenue system in association with other relevant features of the imperial administration stimulated the trade in agricultural produce and manufactured goods probably on an unprecedented scale. Urbanization as well as population had, in all probability, an upward trend. Even if there was no trade with Europe, the other developments were enough to generate a secular rise in prices. The limited magnitude and uneven character of this upward trend probably reflect the quantitative limitations of these positive developments.

As the cost of water transport was relatively low, a substantial part of the inter-regional trade in cheap bulk goods like foodgrains, salt and saltpetre was carried along the coast or the inland waterways. For the same reason, even the cross-country trade in more expensive items used the water routes whenever practicable. The main north Indian water route was of course the Ganges, linking Allahabad to Rajmahal via Benares and Patna. Beyond Rajmahal, the trade goods moved to and from places like Malda, Hugli and Dacca along the numerous tributaries and distributories of the same river while to the west, the Jumna linked Allahabad to Agra and the distributories of the Ganges helped maintain commercial links with remoter parts.[1] Between Allahabad and Patna, and particularly in the stretch west of Benares, the Ganges was fully navigable only during part of the year – during and after the monsoons. In winter the boats plied only between Patna and the riverine tracts of Bengal.[2] In the north-west, the Indus provided a lifeline for commerce for a more limited area between Lahore and the mouth of the river. Multan once had a considerable trade based on its proximity to the Indus, but by the mid-seventeenth century the connecting channel had silted up in places lessening traffic, and with the decline of Thatta, the goods formerly sent there by river had to be carried overland to Surat.[3]

The overland route from Agra to Patna followed the course of the rivers, at some distance south of the waterway between Shikohabad and Chaparghata, closer to it between Rampur and Allahabad and hugging the north bank between Allahabad and Benares. Between Benares and Patna, the route first moved south across the Son and then north again forming a triangle with the river as one side. Another route across

[1] For cartographic representation of the main routes, based on the travellers' accounts, see: Deloche [284], xii–xviii, xxii.

[2] Tavernier [104], I, 101.

[3] Manucci [110], III, 77.

riverine Bengal linked Balasore in Orissa via Midnapore, Kasimbazar, Rajmahal and Monghyr to Patna. In the north-west, the trade route from Agra linked up with the central Asian highways of commerce at Kandahar via Delhi, Lahore and Kabul.

The flow of goods between Gujarat and north India was served by two main routes. The first linked Surat with Agra through western Rajasthan via Ajmer, Merta, Jodhpur, Jalor, Ahmedabad, Cambay and Broach. The second, more easterly, route passed through Malwa and Khandesh: the major cities of this road included Gwalior, Sironj, Ujjain, Mandu and Burhanpur; beyond Thalner, it followed the course of the Tapti to Surat. There were alternative routes for parts of the journey which served to link much of the interior region to these main highways. Sir Thomas Roe followed the eastern route from Surat to Burhanpur and on to Mandu and then turned westwards passing through Dhar, Jalor and Chitor on his way to Ajmer: in Rajasthan, this route went through Mewar instead of Marwar. His return journey took him through Ranthambhor to Mandu and then linked up with the main road to Surat at Broach via Dohad, Ahmedabad and Baroda. In western Rajasthan, there was an alternative to the Jodhpur to Ajmer stretch via Sirohi and Jalor. The route through Malwa also had an alternative for the Sironj to Burhanpur stretch further to the east avoiding Ujjain and Mandu.

The trade links between the two coasts were also maintained along more than one route. One went from Surat south-eastwards to Aurangabad and then through Ashti and Golconda to Masulipatam. On his return journey from Masulipatam in 1666, Thevenot took a southerly route beyond Ashti via Bidar and then went onwards through Burhanpur instead of eastwards through Aurangabad. Tavernier's travels indicate two alternative routes betwen Surat and Aurangabad. Other roads connected Golconda to Goa, the diamond mines and, through Gendikota, to Madras. The Dabul-Goa route went some distance into the interior of the country where it linked up with the Goa-Bijapur road. The Masulipatam-Paliacatta route hugged the coastline most of the way, passing through Nellore.

The evidence on the trade routes strongly suggests that there was an elaborate infrastructure to facilitate the growth of an integrated market covering extensive parts of Hindustan, Bengal, Rajasthan, Gujarat, Malwa and the Deccan, both east and west. The link with regions further south was maintained mainly along the coast: the absence of wheeled traffic in the area along with other evidence suggests that production for distant markets in the region was heavily concentrated in the coastal zones. The trunk routes were evidently served by branch roads which went deep into the country. The direct evidence

on the latter is limited, but frequent references to the flow of commodities from extensive areas even into the less-known emporia and to the 'dependence' of the villages on the *qaṣbas* are sufficient indication of their existence. The network of trade routes does not prove that a national market had emerged: yet their alignment does indicate the extent to which places in the deep interior, and not merely a few major emporia or centres of luxury production, were involved in the inter-regional exchange of commodities.

Despite the diversity and the spatial range of the inland trade, the scale of its markets was of course small by modern standards. Moreland's comment on the transport of foodstuff by *Banjāras* using up to 20,000 pack-oxen that 'an entire season's traffic would be equivalent to an amount which a railway could carry over an equal distance in less than a week', is an apt summary of differences in scale as between the modern and the mediaeval markets. Different parts of the sub-continent also had a wide range of mutually independent economic institutions: weights, measures, currency, systems of taxation varied from place to place and commodities passing from one part of the empire to another had to cross a very large number of toll barriers. Still fragmented markets and peddling trade – categories used by Van Leur in his analysis of Asian trade – are hardly the apt descriptions of India's commerce in Mughal times.[1] Those labels would perhaps fit the isolated rural market and the actual pedlar, but these too were parts of a much wider network often responding to changes in demand or supply in remote places.

The pre-modern market in India discharged two distinct functions: it brought together commodities for the consumption of the local buyers or for distribution among consumers in distant markets. The two functions were not mutually exclusive, could co-exist in the same geographical location, and be managed by the same organization and people. However, there were places and traders concerned more, if not exclusively, with one rather than the other. Instances of total absence of links between the two types of markets were probably rare. A second characteristic of Indian markets was the hierarchy of scales ranging from the minuscule rural *hāṭ* to the emporia of international trade like Surat or Agra. Combining these two categories, the Indian markets may be classified into four main types: (1) the emporia for long-distance trade, inland, overland or overseas; (2) small-scale bazaars where goods were gathered from places within a short radius primarily for purposes of local consumption and *maṇḍīs* or wholesale markets; (3) periodic fairs

[1] For a detailed discussion of the categories relevant to an analysis of India's pre-modern markets, see: Chaudhuri [267]. The present discussion, despite differences in matters of detail, borrows heavily from Dr Chaudhuri's analysis. The quotations, except where otherwise indicated, are from his work.

where 'specialized traders met together to sell and replenish their stocks' but consumers were not excluded; (4) the truly 'isolated' rural market where the local surplus produce was exchanged among the producers-cum-consumers. There are plentiful references in our sources to close and continuous links between the first three types. The existence of the fourth type is hinted at in contemporary literature, though there is some doubt if it was really distinguishable from the periodic *hāt*. The first category had several sub-types: the port towns geared mainly to international trade, the great inland emporia 'more sensitive to economic watersheds and catchment areas' and the smaller urban centres which collected goods from a spatially limited hinterland to be redistributed through neighbouring as well as distant markets. The difference between the three sub-types was of scale rather than economic function. The concept of 'primary nodal markets' has been applied to the major commercial emporia which acted as 'intermediaries between producing and consuming markets widely scattered in space' and their multilateral trade explained as 'a secondary development of their purely bilateral trade'. Perhaps the multilateral trade of India's commercial emporia is better explained with reference to geographical and political factors. Inland emporia like Agra, Lahore or Burhanpur developed as such because they were at the cross-roads of inter-regional trade or, as centres of administration, provided vast markets which naturally attracted traders from different quarters. The port towns developed similar functions as entry points for the imported and coastal trade goods, and exit points for the produce of inland territories. Every such emporium 'included three types of market: a purely local market serving the needs of the resident population, a wholesale spot market which supplied both the retail trade, the bazaar, and inter-regional commerce, and finally, the latter's offshoot, a wholesale forward market'.

The merchants of the period were also heterogeneous in terms of their functions and wealth. Very rich traders are mentioned in connection with almost every emporium,[1] but the large port-towns had merchants comparable to Europe's merchant princes in wealth and power. In fact, the Surat merchant Vīrjī Vora was reputed to be the wealthiest man of his time. 'Abdu'l Ghafūr and Aḥmad Chellaby of Surat, Mīr Jumla of the Golconda kingdom, Malay Chetti, Kasi Viranna and Sunca Rama Chetti of southern Coromandel were masters of extensive commercial empires. Their trade covered a wide range of commodities and many branches of the inter-regional trade. Their operations extended to most of India's traditional markets. Some owned large fleets of ships. Vīrjī Vora and Kasi Viranna exercised monopoly powers over certain commodities, while others had similar ambitions. Such traders could

[1] For the wealth of the trading classes, see chapter x.

easily afford to buy up an entire ship's cargo imported by the European companies. While the wealth of such merchants was derived mainly from trade, inland and foreign, links with the political authorities as financiers and tax-farmers could be an important source of capital accumulation, especially in the eighteenth century. Hīrānand Sāhu, a Marwari banker from Amber, came to Bihar in the seventeenth century as Maharaja Man Singh's banker-purveyor. His son Mānik Chand, the first Jagat Seṭh (literally, 'Banker to the World') acquired enormous wealth and power as Murshid Qulī Khān's banker. His sons collected taxes and remitted the revenue of Bengal to Delhi through their banking houses, gave credits to the *zamīndārs*, seized *zamīndārī* estates by foreclosing mortgages and further profited from trade in produce paid as revenue. Their wealth was estimated at Rs. 100 million. The notorious adventurer Omichand started his career as a petty *dādnī* merchant but rose high partly through unscrupulous business deals, partly by greasing the right palms; in 1741, Omichand was mintmaster of Patna. The leading merchants enjoyed considerable influence with the administration – a connection which had its serious risks and demanded much political skill. The fortunes of the great trading families were generally short-lived: their failures were political rather than commercial.

Less affluent and powerful than the great merchants, there were other independent traders trading with their own and borrowed capital. The range of their activities – both the variety of commodities they dealt in and the geographical area within which they operated – were relatively limited, but still on a large scale. They employed their own agents and sometimes had a dealer network.

The typical small merchant operated within a limited area and their functions were often, but not always, specialized. Nor were their activities always confined to a particular locality. On his journey to Agra, Tavernier saw in a small town 'five or six shops belonging to Banias which sell butter, rice, straw and vegetables'. By the side of one of these shops, 'stood a large warehouse filled with sacks of rice and grain'. This brief description epitomized the characteristic activities of the small merchant. The autobiography of Banārāsīdās, the *Ardha-kathānak*, traces the history of a Jain merchant family of very limited means. Banārāsī's father dealt in jewels, mostly in partnership with others, at Agra, Jaunpur and Khairabad. When he invested Rs. 200, he had to borrow part of the capital. Banārāsī, too, set up a partnership business at Agra: 'they bought jewels, sold them and again purchased them in large quantities' earning 200 rupees in two years. His career was a tale of repeated failures, but he could stumble along with fresh advances of capital from the kinship group after every débâcle. In the

scale and manner of their operations, Banārāsī and his family are comparable to the Armenian businessman Hovhannes whose activities have been described as 'peddling trade'. Wandering slowly from town to town the Armenian took nearly a year to sell three camel loads of cloth to buy about as many of indigo. Such minuscule trading activity within a framework of sophisticated organization was indeed a part of India's commercial world,[1] but by no means its dominant feature. The merchant prince and the pedlar could co-exist, because of the very low cost of the latter's trading operations: small trade was essentially geared to earning a subsistence living rather than profit.

The small traders included one curious element, the *Banjāras*. Divided into four tribes dealing respectively with corn, rice, pulses and salt, they lived in camps or *ṭāṇḍās* with their oxen grazing in the open fields. Sometimes they were hired by merchants, 'but most commonly they are merchants themselves, buying of graine where it is Cheape to be had and carreinge it to places where it is dearer, and from thence againe relade themselves with any thinge that will yield benefitt in other places...'. A *Banjāra* caravan could have as many as 20,000 pack-oxen. Here we have an instance of peddling trade organized on a massive scale.[2]

The peasant, too, at times acted as trader 'carting his produce to the local market or the town'. In the Rajput principalities, Marwari and Gujarati tax collectors collected the revenue in kind and then converted it into cash. The peasant's creditors to whom he sold his produce on advance contract included the urban merchant or his agent as well as the village moneylender: they all had a role as traders in marketing the agricultural produce.

The line of demarcation between merchants and middlemen was not always clear. The European Companies' brokers were often considerable merchants with independent trading activities of their own. But the function of the broker or *dalāl* was also a specialized one. Each class of goods had its separate brokers, such as house brokers, cart brokers, etc. paying money to those who have sold and receiving it from those who have bought, charging commissions of 1 to 2 per cent according to the class of goods. There are references to *dalāls* being 'accustomed with and appointed by the Government' to particular lines of business in different parts of Bengal. It is not clear if this practice obtained in other parts of the country as well.[3]

The social base of the trading community was confined to a small

[1] Lvon Khachikian, 'Le registre d'un marchand arménien en Perse, en Inde et au Tibet (1682–93)', *Annales*, 22, 231–78; N. Steensgaard, *The Asian Trade Revolution of the Seventeenth Century – The East India Companies and the Decline of the Caravan Trade* (Chicago and London, 1973), 22–31.

[2] Mundy [96], II, 95–6; Tavernier [104], I, 34.

[3] Tavernier [104], I, 156; Master [32], II, 15.

group of castes – Baniyas, Bohras and Parsees in Gujarat, Hindu and Jain Marwaris in Rajasthan, Kshatris in Hindustan and the Punjab and Chettis and Komatis on the east coast. Muslim merchants, mostly of foreign origin but settled in India, were important in the trade of Gujarat, the Deccan and Bengal, while high Muslim officials had a share in commerce in all parts of the country. The traditional mercantile castes of Bengal appear in our sources for the period mainly as small traders. In the lists of merchants working for the English East India Company in Bengal there are Bengalis who probably belonged to the non-mercantile castes. One important trading group to be found everywhere was the Armenians. Most of these merchant groups operated from their home base. Armenians, Gujarati Banias and Marwaris and, to a lesser extent, the Kshatris, were major exceptions to this rule. The majority of the Hindu traders established in Bengal, whose names occur in the European factory records in connection with coastal or overseas trade, appear to have been Gujaratis. By the eighteenth century, Marwaris were to be found in most parts of India as bankers and financiers. Business deals were mostly confined within the limits of one's own caste. Hindus did act as bankers for Muslim merchants and employ their ships for overseas trade. Other forms of business between merchants of the two communities were exceptional.

If other worldly values are a barrier to economic enterprise, the Indian trader surely suffered from no such handicaps. 'The Banias', wrote one observer, 'are mainly addicted to prosecute their Temporal Interest, and the amassing of Treasure; and therefore will fly at the securing of a Pice, tho' they can command whole Lacks of Roupies'.[1] When children elsewhere spent their time in play, the Baniya child was made to learn arithmetic by way of training for his hereditary profession. The Indian trader had a purely utilitarian view of education. When young Banārasī showed a penchant for scholarly pursuits, his 'elders told him that too much study was meant for a Brahman or a Bhat; the son of a Vanik ought to sit in the shop. One who studied too much would have to beg.'[2] Though the great merchants did live in considerable style, parsimony was very much a part of the Baniya norm. Conspicuous consumption, which could sometimes be ruinous, centred on weddings and pilgrimage. Charity for religious purposes was also common for high value was attached to a reputation for piety. 'Cunning as the devil' is a favourite description of Indian traders in contemporary European accounts. Generally, the epithet was more a tribute to their business acumen than a pejorative reference to their business morality. Though the unscrupulous adventurer who made good was not unknown, a reputation for honesty was an essential asset for the average businessman,

[1] Ovington [108], 165. [2] *Ardhakathānak*, (trans.), I, 64.

especially since trade was linked to an elaborate structure of credit and banking. Banārasīdās thus summed up the norm which reinforced such pragmatic considerations: '...if one tells just one lie, one is condemned to hell'.[1] The traders' Puritan ethic was, of course, not above compromises. In a graphic account of how the brokers conducted their affairs, Tavernier writes that the family members exhorted the head of the family 'to take care of their business, and, if possible to defraud rather than be defrauded'.[2] '...My chardge is above my expectation', complained Sir Thomas Roe, 'but I must suffer it,...this beeing a generall character: every man will promise any thing, but to this hower I never found one man that ever held his woord in one thing without beeing followed and sued too sixe dayes togither – no answer but "to-morrowe"'.[3] In describing the Surat Baniyas, Fryer used stronger language: '...Lying, Dissembling, Cheating are their Masterpiece.'[4] European observers found the Baniyas 'obsequious, humble and patient to a miracle'.[5] Stories abound concerning the Indian merchants' extreme circumspection and submissiveness. These were qualities which helped them survive the rapacity and arbitrariness of the nobility.

As has been discussed above, the various classes of merchants represented not only differences in the scale of commercial activity, but a certain measure of specialization. In the chain of exchanges linking the producer to the ultimate consumer in the local or distant markets, the different groups performed distinct functions. Our information regarding the procurement of commodities comes almost exclusively from the European sources and is hence biased in the direction of the Companies' special needs. It is, however, quite clear that they latched on to an existing system though they might have made more use of some of its elements than of others. Besides, the factory records also provide a fair amount of data on the manner of procurement by Indian traders without any reference to the Companies' 'investments'.

Commodities were procured either through spot purchase or advance contract known as the system of *dādnī*. Spot purchases were mostly made either at the major emporia or the smaller urban markets. However, both the small 'pedlar'-type trader and the bigger merchants, through their 'factors' or agents and *dalāls*, procured a part of their supplies through spot purchases directly from the producers. The great bulk of the commodities procured for the long-distance markets was almost certainly procured through advance contract by the latter half of the seventeenth century, a development to which the trade of the European Companies with their centrally controlled countrywide network for procurement probably contributed. As an English factor lamented in

[1] Ibid. 67. [2] Op. cit., II, 25–6.
[3] Roe [87], 80. [4] Fryer [107], I, 211–12. [5] Ovington [108], 163.

1677, formerly Masulipatam 'was soe well stored with able Merchants, that many ships Ladeings of Divers sorts/Callicoes might and were procurable in the space of two or three dayes',[1] but at the time when he wrote 'noe considerable quantity of any sort of Callicoes' could be 'procured without given money out some moneths before'. While this statement probably exaggerated the change – because as late as the middle years of the century, the wholesale markets of Masulipatam could supply twenty large ships and more – it identifies correctly a basic shift in the system of procurement. Advance contract was necessary because some commodities were not procurable without it, the producers' own resources being inadequate for coping with the expanded demand. It was also useful in precluding competition from other buyers and binding-up producers. The system, in the view of one scholar, 'was essentially a form of forward dealing...a means of reducing price-fluctuations and the instability of the market arising from a disequilibrium between supply and demand'.[2] It may, however, be argued that the inadequacy of the producers' capital and the desire to corner a part of the purchasing market were equally important causal factors in the development of the *dādnī* system. How the system operated was explained by Streynsham Master in a letter dated 1676. For procuring cloth at Dacca, the *dalāls*, appointed by the government 'haveing tooke money, deliver it to the Picars who carry it from towne to towne, and deliver it to the weavers, soe that the only security of the Picars are the weavers, of the broakers are the Picars, and the Honourable Companeys money, the Broakers'.[3] The system of procurement adopted by Kasi Viranna, with entire villages of weavers bound up to produce for him, or Vīrjī Vora with his extensive monopsonies, must have been similar. In 1625 Vīrjī Vora bought up all the pepper brought into Surat – an incident which showed that a merchant prince with enormous resources of capital could procure commodities from dealers and corner a market without advance contract or spot purchase. Further, the *dādnī* system could operate with or without the intervention of *dalāls* and probably even *paikārs*. The reference to the presence of the Indian merchants' 'factors' at Malda suggests that they dealt directly with the weavers without going through any middlemen.

The expanding commerce of Mughal India was serviced by a complex and elaborate structure of credit.[4] Its historical roots went far back in time. The *Manusmriti* specifies the *Varna* for which moneylending is appropriate as well as the limits within which usury was to be confined.

[1] Master [32], II, 114.

[2] See: Chaudhuri [267].

[3] Master [32], II, 14–15.

[4] For a detailed survey of credit institutions, see: Habib [345], Spengler, 'Comment on Usury in Mediaeval India', '*Comparative Studies in Society and History*, July 1964, 393–423; also: Habib [343].

As in all other established forms of economic activity in India, specialized caste-groups had emerged to deal with particular aspects of credit.

At the higher levels of commercial activity, the supply of credit came largely from the merchants themselves. By the early eighteenth century, however, some degree of specialization in mercantile activities appears to have emerged with some merchant houses – the most famous of which was the house of Jagat Seṭhs – concentrating more on financial rather than purely commercial activities. However, as the experience of the European Companies suggests, throughout the seventeenth century, big merchants like Vīrjī Vora were the chief source of commercial credit.

The most characteristic credit institution in India was the *hundī* or bill of exchange promising payment 'after a specified period, usually two months or less' at a particular place and allowing a discount which included interest, insurance (*bīma*) charges and cost of transmission of money. *Hunḍīs*, rather than cash, increasingly became the standard form of payment in major commercial transactions. In long-distance trade, this form of payment not only met the requirements of an expanding demand for credit, but reduced the risks involved in the transmission of cash to distant places. In the seventeenth century, the revenue from Bengal went to Agra in a *qāfila* of bullock-carts; in the mid-eighteenth century Jagat Seṭh transmitted it to Delhi as a *hunḍī* drawn on his agents there. As a market in these fully saleable *hunḍīs* developed, they provided a channel for investments. This business was mainly in the hands of the professional money-changers – the *ṣarrāfs* or shroffs – who thus acquired a new and crucial role as commercial bankers, providing a specialized service as suppliers of credit. A serious dispute in 1715 between the Ahmedabad merchants and the *ṣarrāfs* who had raised the rate of discount (*ānṭh*) on cash-payments made against *hunḍīs* highlights the extent to which banking activities had become distinct from purely mercantile ones.

In fact, a set of institutions and business practices developed which helped to mobilize the savings in the economy for purposes of commercial investment, speculative or otherwise. Of these, perhaps the most important was a rudimentary form of deposit banking with the *ṣarrāfs* accepting deposits (*amānat*) payable on demand. One account of such deposit banking – at Agra in 1645 – gives the interest rate as 5/8 per cent per month or $7\frac{1}{2}$ per cent per annum;[1] the same interest rate for deposits obtained in Surat in the 1630s. The *ṣarrāfs* invested the deposits at 1 to $2\frac{1}{2}$ per cent 'running some hazzard for the same'. The hazards included the possibilities of bank failure. The *ṣarrāfs* at times

[1] Foster [31] (1642–5), 303; (1634–6), 169.

lent to 'persons of qualletie' at very high rates sums which could not be recalled at short notice and, if doubts arose as to the formers' financial stability, there would be a run on the bank involving many in financial ruin. Deposits were accepted both in cash and kind. It was not unusual for officials to invest, not quite legally, funds from the government treasury with the *ṣarrāfs* and receive the interest themselves.

A form of speculative investment highly popular in the seventeenth century was 'avog' or bottomry in which money was lent at interest rates varying from 14 to 60 per cent according to the risks involved and invested in cargo shipped to a particular place, 'the lenders bearing all risks of the voyage'.

The imperial treasury and the nobles were among the important sources of credit. There are several instances of the treasury granting loans to merchants in Shāhjahān's reign including the notorious arrangement under which indigo was declared a royal monopoly and the monopoly rights along with the loan of Rs. 500,000 given to a trader on a profit-sharing basis. The Jagat Seṭhs' rise to financial eminence was partly due to the access they had to the Bengal treasury as a source of credit. Shā'ista Khān, during his governorship of Bengal, at times forced merchants to accept loans from him. An interesting aspect of this state involvement in moneylending and usury was the total absence of any religious scruples even in the reign of Aurangzeb, despite the very clear injunctions of Islam prohibiting usury. In fact the machinery of the state, functioning through secular officials, sought to provide full protection for the dealers in credit, though in cases of dispute the affluent who could afford to bribe inevitably had the better chance. However, since the system of credit depended heavily on one's reputation for trustworthiness rather than on any intricate legal system, the sanctions which kept the bankers and moneylenders on the straight path were largely independent of the state machinery. It is worth noting that the English, used to their elaborate laws of contract, found the Indian system more than satisfactory.[1]

Usurious moneylending was an essential prop for the lower levels of commerce with the local *sāhu* or *mahājan* providing the credit. At that level, however, the financing of trade was something more than a purely market transaction and involved a measure of subservience on part of the trader to the moneylender. The *mahājan*, it appears, provided the capital, and the stock was peddled in various places, the interest and the capital being recovered from the goods brought back by the trader. The artisan, whether working for himself or on the basis of advance contract, appears to have been equally dependent on credit. What the rate of interest was at these levels of petty trade, we do not know for

[1] Foster [31] (1665–7), 265.

certain. The fact that the peasants in eighteenth-century Bengal borrowed from mendicants, *zamīndārs'* retainers and professional moneylenders at rates of up to 150 per cent per annum indicates how extortionate usury could be when the debtor's credit and bargaining power were low.

The interest rates in the higher reaches of commerce, calculated on a monthly basis, normally ranged from 6 to 12 per cent at Agra and Surat. It could be as high as 30 per cent, but this was very exceptional. On the Coromandel Coast, rates of 18 to 36 per cent are mentioned in our sources. The regional differences in interest rates persist throughout our period. Evidently, the capital market in the sub-continent was still a long way from integration. In fact, despite the growing commerce and the related demand for credit in Bengal, the region did not have merchants comparable to the great Surat traders as sources of credit until the emergence of the house of Jagat Seṭh. Large-scale financing continued to be linked to great commercial fortunes which were not replaced by the rudimentary credit institutions. The owners of such fortunes were evidently reluctant to venture their capital in distant places. The market for credit as the one for commodities hence could not entirely transcend its fragmented character.

By the standards of pre-industrial times, the facilities for transport in Mughal India were efficient and adequate, 'not less convenient than all the arrangements for marching in comfort either in France or in Italy'.[1] Pack-oxen and ox-drawn carts, as well as camels, were the chief means of transport. Preference for these slower modes of travel is no doubt explained by the limited availability of horses in India and the very high price of the imported varieties. Poorer people used oxen both for carrying loads and as mounts. Those who could afford it travelled by the very comfortable palanquins, 'whose carriage', Ovington remarked, 'is as easie and pleasant as that of our Chairs in the Streets of London, but far surpasseth them in point of State and quick dispatches of a Journey'. The light two-wheeled bullock-cart, however, was the form of transport most widely in use, for carrying passengers as well as goods. These were strongly built, could carry two to four persons besides the driver, and were of two types – covered (*chhatrīdār*), and without a cover. The forepart and sides were usually open, unless they happened to carry women. Four-wheeled 'coaches' were also used, though not very frequently. The carts could be easily taken apart and reassembled: this was of great advantage in fording rivers and crossing difficult terrain. By all accounts, the oxen drawing the carts were reasonably swift: 'by constant and long exercise', we are told, they acquired 'a great Facility and Speed of foot'.[2] 'They will run with any

[1] Tavernier [104], I, 32.

[2] Ovington [108], 151–2; Fitch [84], 17–18.

horse,' wrote Fitch describing the little bulls drawing the fancy silk-covered coaches. Our sources differ a little on the distance they covered in a day: Terry mentions twenty miles a day or more, Mundy five to seven *kros*,[1] and Tavernier twelve to fifteen leagues 'always at the trot', taking an hour to an hour-and-a-quarter to travel a league. A palanquin, carried by four to six servants, 'with others that attend and relieve them by turns' would, according to Ovington 'with ease carry it twenty or thirty miles a day'. Camels – also used for carrying goods as well as people, especially in the caravans travelling between Agra and Surat – were generally considered inferior to carts which travelled further in a day, carried three camel-loads and could make journeys lasting sixty days. Summing-up the relative advantages, Sir Thomas Roe reported that the camel 'lading and unlading with so little helpe, hath but five howers to goe; the cart, which is never unlade, will march all day. Besides, it is a third cheaper in the hier, they require not soe many attendants, and your goods take noe harme; whereas from cammells they often fall' and were also bruising at unloading. The average weight carried by an ox is given by Tavernier as 300 to 350 livres, i.e. 327 to 390.5 lb. Figures quoted in other sources range from 265 to 310 lb. Hughes mentions about half a ton as the usual load carried by a cart. It is not clear if this 'ton' was the same as the 'tun' of the English commercial correspondence of the period which Moreland puts at two-fifths to three-fifths of the net registered ton of modern shipping. A cart was usually drawn by a pair of oxen. However, even the smallest wagons which brought the marble from near Lahore to Deccan for the tomb of Aurangzeb's wife were each drawn by twelve oxen and it took 1,400 oxen to draw the niche-stone of the great mosque at Golconda. The wagons which carried the revenue from Bengal to Agra were each drawn by six oxen. The carts were the cheapest form of transport for both people and goods. For palanquins, one usually took twelve men to carry each and the charges were Rs. 4 per month per person, but Rs. 5 if the journey took more than sixty days. The hire of a cart cost about R. 1 a day; a journey from Surat to Agra or Golconda cost about Rs. 40 to Rs. 45. In 1639, the freight charge for carting goods from Agra to Multan is quoted at Rs. 2½ per 'maen'. The normal cost for Patna to Agra land transport was Rs. 1¼ to Rs. 2¼ per maund of 62½ lb. including the supervisor's pay which was Rs. 10 to Rs. 15 for the journey. For the carriage of goods from Patna to Agra which took anything between twenty-nine and forty days, the rule was to allow the full stipulated rates for thirty days with a deduction of 25 per cent

[1] Mundy [96] apparently contradicts himself when he gives the relevant distance as 'not above 6 or 7 miles a daye att most' (I, 96); however, 5–7 *kros* a day is the figure he mentions for 'strong carts with light loads' (II, 286).

for time taken in excess of that period. In practice, the stipulated rate was for the longer period with a premium of Rs. 8 if the carts arrived in time.[1]

The belief that in Mughal India horses were used only by the 'better sort' and exclusively for pleasure or in war, is not entirely correct. We find the far from affluent trader Banārasī travelling from Jaunpur to Agra and Khairabad on horseback. Tavernier on a journey from Dacca to Kasimbazar left the boat somewhere near his destination and hired a horse. At Harshapur in Orissa Manrique 'purchased a horse...for travelling in the guise of a sodagor' (trader). He also wished to hire horses for his trip from Patna to Agra but was advised that a cart would be more convenient. Between Golconda and Masulipatam – where wheeled traffic was difficult and very rare 'the roads being too much interrupted by high mountains, tanks and rivers'[2] – pack-horses as well as oxen and larger, fast-moving palanquins were used to carry men and goods. In Golconda, 500 to 600 horses daily entered the town carrying toddy in leather bottles. The journey between Agra and Isfahan was at times undertaken by merchants on horseback in groups of three or four: this way they accomplished the journey in half the usual time, in sixty to seventy-five days. Carriages drawn by horses, though very rare, were known. Besides the famous English coach in which Jahangir travelled to Ajmir, and the Bidar Sultan's golden bed with silk canopy drawn by four horses in gilt harness mentioned by Nikitin, in the early sixteenth century Barbosa found the affluent citizens of Cambay taking their pleasure in horse-drawn carriages. More important, the *Ā'īn* specifically mentions 'carriages suited for horses...called *ghurbahal*'. Ovington mentions a curious technical failure which no doubt affected the usefulness of horses in India: '...in the shooing of them', he wrote, ''tis commonly done so inartifically that they easily batter their hoofs, and expose them to surbating with a very moderate journey'.[3]

Camels, the most important draught-animal after oxen, were bred in very large numbers in western Rajasthan, Gujarat and Sind. The best, according to Abū'l Faẓl, came from Cutch while 'the greatest abundance' was in Sind where many inhabitants owned 'ten thousand camels and upwards'. For transport of goods on a large scale, 'a Caphila of the best Cammells' though 'troublesome enough' was considered most convenient. Asses and buffaloes were also used as draught animals, the

[1] Terry [85], 311–12; Tavernier [104], I, 32, 37–8, 47, 93, 119, 124; Ovington [108], 152; Roe [87], 321; Mundy [96], II, 367–8; Foster [31] (1637–41), 135–6; Abū'l Faẓl [123], 68.

[2] Incidentally, Moreland's view that there was no wheeled traffic at all in this region is not correct. Tavernier [104] specifically mentions that he did take with him a small cart to the Kollur diamond mines, but was obliged to dismantle it repeatedly (I, 141–2).

[3] *Ardhakathānak*, (trans.), I, 64, 111; Tavernier [104], I, 73, 107, 128, 142; Manrique [98], II, 98, 145; Roe [87], 283 f.; Barbosa [81], I, 141; Ovington [108], 151; Abū'l Faẓl [123], 68.

latter exclusively for carrying 'large bags of fresh water'. The use of elephants was necessarily confined to the uppermost stratum of society and the animals could be fitted out with almost incredible extravagance. They performed more mundane functions in the transport of heavy artillery and were also used in parts of the country to carry heavy goods.[1]

In the hilly areas, the transport of men and goods had to cope with special problems. On his journey to Kashmir, the Great Mughal took with him a few 'sure-footed' elephants and mules for his luggage and the ladies of the harem, but left the camels behind, 'the mountains being too steep and craggy for their long stiff legs'. 'Porters supplied the place of camels'; Bernier estimated that some 30,000 of them were employed despite the fact that the king, *amīrs* and traders had been sending forward luggage and articles 'of every sort' for a month. On the journey from Patna to Bhutan, oxen, camels and hill-ponies were used as far as Gorakhpur. Women porters carried people across the mountain passess while baggage and provisions were loaded on goats: the rates were Rs. 2 per porter for a ten-day journey and the same amount for each quintal of goat load. In the difficult passes horses had to be 'handed up with ropes'. Finch saw similar arrangements on the Kashmir–Kashgar road where goods were 'triced up and let downe often by engines and devices'.[2]

Our sources offer some indication of the volume and variety of traffic along the waterways which accounted for a very high proportion of the country's inland trade. Fitch travelled from Agra to Satgaon 'in the company of one hundred-and-four score boats'. These barges which carried salt and other commodities were 4 to 500 'tuns' each. On the river near Etawah, Mundy saw 'many great lighters (barges), such as are in Agra', each at least 3 to 400 'tuns'. At Rajmahal, Manrique found 'over two thousand rowing vessels at anchor', 'in regular streets as it were, thus making an attractive and beautiful city'. Finch saw many boats going down the Ravi near Lahore to Thatta. According to our sources, some 30,000 boats plied in Kashmir and some 40,000 in the *sarkār* of Thatta. Another source estimated the carrying capacity of these flat-bottomed boats at 1,000 to 2,000 'maens'. Bowrey mentions the 'patellas' plying between Patna and Hugli, each carrying 4,000 to 6,000 'Bengala maunds' (i.e. approximately 130 to 200 tons). The imperial fleet had 'strong boats, capable of carrying elephants'. Not all parts of the country – including some areas of riverine Bengal – were, however, provided with boats because timber was scarce in some regions. Near Tamluk, Manrique had to cross certain streams 'on big earthen pots', lying on his 'stomach on the jar, covering its mouth, and

[1] Abū'l Faẓl [123], 61; Mundy [96], II, 283; Ovington [108], 151.
[2] Bernier [102], 392; Tavernier [104], II, 205–207; Finch [85], 170.

so cross by paddling with his hands and feet'. In many parts of the Deccan, a round basket-like vessel ten to twelve feet in diameter, made of branches of osier and covered with ox-hide, was frequently used for crossing rivers. While our sources frequently refer to the relative cheapness of water transport, there is little precise data on the actual costs involved. The relative costs mentioned by an English factor, Henry Bornford, in 1639 are probably representative. Freight charges on boats from Multan to Thatta was Rs. ¾ per 'maen'; the charges for land transport for a somewhat shorter distance was Rs. 2½ per 'maen'. At Multan, Bornford added, 'the best way is to buy a boate' which was cheaper than at Lahore, 'one at 2,000 maens burthen not costing more than 250 ru[pees] or thereabouts'.[1]

The boats and ships plying on the inland waterways and along the coast were of a wide variety ranging from the tiny *ballons* and *ḍingis* to the 'floating mansions' Manrique saw at Rajmahal and the majestic junks which included some of the biggest ships of the period. The large barges with 'both ends extraordinairie high' appears to have been most widely used for large-scale transport of goods on the Ganges. On the Indus system, flat-bottomed boats were in vogue. Some of the types described by Varthema in the early sixteenth century in his account of Malabar were used all along the coasts. These included the boats of '3–400 butts' which had two sails, the flat-bottomed *sambūq*, the *capel*, with rounded bottom, *prau*, 'all of one piece' with oars and masts of cane, capable of carrying fifty to sixty persons, *almadia*, a small bark also of one piece, and the narrow *chaturi*, used by the Malabari corsairs, which went by sail or oar faster than any galley, and the fust, a light galley. The vessels most frequently used along the Konkan coast were the large *patamārs* carrying 200 to 250 persons. Gujarat had besides her twenty-seven ports for the big ships, 45 *baras* 'meant for small boats called *hodis*'. Varthema was full of admiration for the technology of boat construction in Malabar; no oakum was used between one plank and another, but these were joined so well that no water could seep through. The boats were plastered with pitch outside and 'an immense quantity of nails' was put in.[2]

Given the technology of transport in this period – and the level of peace and security – the time taken in journeys across the country were not very long. The journey from Surat to Agra by cart took thirty-five to forty days; it could, however, take up to seventy days while normally laden carts and camels covered the distance in fifty days. Manrique travelled the 544 miles from Patna to Agra in twenty-five days averaging

[1] Finch [84], 18; Fitch [85], 161; Mundy [96], II, 87–8; Jourdain [86], 162; Manrique [98], I, 433; II, 135; Abū'l Faẓl [123], II, 26; Bowrey [106], 225; Foster [31] (1637–41), 135–6.

[2] De Varthema [80], 152 f.; *Mir'āt-i Aḥmadī* [167], (Supplement, trans.), 201.

$21\frac{3}{4}$ miles per day, while the time taken by laden carts for the same journey was usually thirty-five days, though twenty-nine, thirty and forty days are mentioned in our sources. These do not compare very unfavourably with the time taken by Tavernier to travel from Belgrade to Constantinople, viz. twenty-nine days. The journey times mentioned in our sources for a number of other routes include the following: Lahore to Multan, ten days; Lahore to Agra, twenty-one days; Surat to Golconda, twenty-seven to forty days; Goa to Bijapur, eight days; Bijapur to Golconda, nine days; Golconda to Aurangabad, sixteen to twenty-five days; Golconda to Masulipatam, eight days. Journeys along the water-routes were generally slower, had to be undertaken when the river was high after the rains, and those going upstream were very slow and difficult. The advantages of relatively low cost must have been considerably reduced by these handicaps which explains the large volume of trade by the land routes along the banks of the Ganges. Fitch took five months on his journey down the Jumna and Ganges from Agra to Satgaon, but, as he pointed out, it could be accomplished in a much shorter time. The boats from Patna took only six days to reach the sea, probably near Pipli; the journey up took eighteen days. A Portuguese mission described by Manrique took two months 'to ascend the Ganges from Hugli to Patna'. Lahore to Thatta was one month by river; the return journey took two months. Along the west coast, the journey from Diu to Surat took four to five days in good weather, seven to eight days when the season was unfavourable. Cambay to Chaul was twelve days' journey and from Calicut to Cape Comorin, eight days. Above Patna, the Ganges was too shallow from January to June or July to be navigable, and navigation along the coast was dangerous during the monsoon.[1]

As Tavernier noted, travel conditions in India under the Mughals were not less comfortable than in France or Italy in his days. But the remark, however, was true only of the better roads, especially the wide imperial highways, with their avenues of mulberry trees, wells, distance markers and caravanserais at every ten *kos*. But not all roads were so well provided and no road was easily negotiable round the year. The road surfaces were badly neglected and reduced to mud during the monsoons; carts using the roads after the rains had to cut fresh tracks with their wheels. Writing in the month of August in 1632, Mundy described the passage between Allahabad and Benares, part of the imperial highway as 'verie badd...for the aboundance of water, bad way and uneven ground'. In Orissa, Manrique had to make his way through mud and swamps and could not cover even seven leagues in

[1] Tavernier [104], I, lxxxi, 37–8, 120, 95; II, 29; Mundy [96], II, 367–8; Manrique [98], I, 36–7; II, 221; Bernier [102], 6; Fitch [85], 16; 55 (Mildenhall); 200, 218 (Withington).

a day. At such times, oxen had to be used instead of carts, because the ditches and reservoirs used for irrigation obstructed the passage of wheeled traffic everywhere. The roads were narrow and if travellers had the misfortune to meet a caravan of pack-oxen, they were obliged to wait two to three days. The stone and masonry bridges to facilitate cart transport – a major achievement of Mughal engineering – spanned mainly the smaller streams, the wider rivers being served by bridges of boats, or, more frequently, ferries. On his journey from Harshapur to Balasore in Orissa, Manrique found that there were neither boats nor bridges on most of the rivers he had to cross; in one day, he crossed eleven, swollen by monsoon showers, wading breast-deep through the rapid currents.[1] In the Rajputana desert, carts were liable to get stuck in the deep sand and travelling was easier when the ground was hardened by rain.

The organization of land transport, largely controlled by the *Banjāras*, was by no means trouble-free. The carters, wrote Mundy, 'doe and demand what they list, goe, come, sett out and Remaine when and where they please', for they were not under any overall command, though the camellers had their chief (*muqaddam*) and each *Banjāra* camp (*ṭānḍā*) its king, bedecked with a pearl necklace. As the *qāfilas* included heterogeneous elements, e.g. camellers, carters, Baluchis and Jats, they would often fight among themselves 'to mortal wounds, pillageing one another like deadly enemies'. The carters at times struck work or simply bolted if they considered the loads too heavy. When *Banjāra qāfilas* met on the narrow roads, fierce fighting over the right of passage was a possibility. On the road through Rajasthan, the carts could be badly damaged by sand and the journey delayed by necessary repairs. Mortality among draught-animals on the Agra–Surat road appears to have been high and at least part of the loss was borne by the traders who hired the animals. During wars and famines, there were also shortages of draught animals. At times the cargo was so badly damaged on the journey that a large proportion had to be written off.[2]

The facilities for the accommodation of travellers varied considerably. The major cities were better provided than the highways; the roads from Agra to Patna and Lahore to Multan were closer to the ideal of a *sarāi* at the end of each day's journey than the road from Agra to Surat through Rajasthan which had 'scarce a Sarae in eight or ten dayes Journie'; and 'nothing soe good acommodation as there is from Agra towards Puttana'. In a place like Orissa, far from the highroads of

[1] Fitch [85], 225 (Withington); Mundy [96], II, 99, 298; Manrique [98], II, 98, 105; Tavernier [104], I, 32–3; Bernier [102], 380; Jourdain [86], 147; Habib [349].

[2] Mundy [96], II, 282 f., 287, 293, 367–8; Tavernier [104], I, 32–3; *Dagh Register* [38] (1631–4), 87, 146.

commerce, there were often no *sarāis* at all. And even a major emporium like Burhanpur suffered from shortage of accommodation when the army was encamped in the city. Still, the total number of *sarāis* was probably adequate for the requirements of inland trade and travel during this period. Sher Shah alone had built 1,700 *sarāis*; Islam Shah also spent generously for the purpose. The *sarāis* along the highways were 'sometimes erected at the expense of neighbouring villages, sometimes at the cost of Princes or rich and powerful men' and large sums were bequeathed for such works. The *sarāis* differed considerably in the quality of accommodation and services they offered, but there are no reasons for supposing that the Indian trader or traveller found them inadequate. Bernier, perhaps the most culture-bound of all European visitors to India in the pre-colonial era, compared them to large barns in which 'hundreds of human beings...mingled with their horses, mules and camels'. 'In summer', he added, 'these buildings are hot and suffocating, and in winter nothing but the breath of so many animals prevents the inmates from dying of cold.' His compatriot Thevenot viewed the *sarāis* very differently and wrote that they, above sixty in number, 'make the beauty of Agra'. The better sort of *sarāi* could accommodate 800 to 1,000 persons with their horses, camels and carts; some were even larger. They contained 'different rooms, halls and verandahs with trees inside the courtyard, and many provision shops' besides warehouses and quarters for the men and women who provided necessary services for the travellers. The foreign traders could live in the *sarāis* for long periods paying a monthly rent. People travelled with their own light bedding, but cots were provided and while provisions had to be bought from the bazaar or the stores inside the *sarāis*, the servants did the cooking for one *paisa* 'or at most two: unlike inn-keepers and stable-men of Europe, they did not fleece the travellers', Manrique gratefully remarked. The poorer *sarāi* was simply 'a great enclosure of walls or hedges, within which 50 or 60 thatched huts' were arranged all around. In the bigger places, fortified with bastions and strong gates, security was of a high order. Manucci writes, 'in every one is an official whose duty it is to close the gates at the going down of the sun...At six o'clock in the morning before opening the gates, the watchman gives three warnings to the travellers, crying in a loud voice that everyone must look after his own things. After these warnings, if anyone suspects that any of his property is missing, the doors are not opened until the lost thing is found. By this means they make sure of having the thief and he is strung up opposite the sarae.' The travellers in Mughal India were, however, prepared for exigencies. At times they spent the night in the open – in tents or in their carts arranged as an enclosure – especially since journeys were often undertaken at night to avoid the

heat of the day and one had to move out of the *sarāis* before they were closed at sunset. On one point, however, all our sources agree: even where inns were scarce, food was not. The Indian traveller, used to living in the open and cooking his own food, probably did not find the conditions too intolerable even in the more inhospitable areas.[1]

The absence of any organized postal system must have acted as a constraint on the development of an integrated market, especially since prices in the selling markets were dependent on information regarding the level of demand in often remote buying markets. The postal system organized by the Mughals catered only to the needs of the state and its high efficiency was of little direct use to the public. Letters were sent through privately-hired *pattamārs* or runners who ran 'so many courses every morning' and thus 'carried them to the remotest Bounds of the Empire'. At Patna, the business of dispatching correspondence by private messenger was in the hands of the *bāzār qāṣids* who set up business in the chief market. A journey from Agra to Patna could be accomplished by the messengers in eleven days, though it might take anything between fifteen and twenty-five days as well. A runner did the journey from Midnapur to Hugli and back in nine days. In the context of the slow pace of economic life, such a system of communication was probably not inadequate.[2]

Moreland suggested that the insecurity on the inland trade routes was such as to reduce commerce to a periodic activity contingent on the organization of large *qāfilas* or caravans, such safety as there was being only in numbers and armed guards one could afford to pay. Our sources agree that it was dangerous to travel alone and *qāfilas* were often very large affairs indeed. Della Valle travelled from Cambay to Ahmedabad with a *qāfila* 'which consisted of above a hundred Coaches, besides foot-men and horse-men, and great loaden wagons'. Mundy met a *qāfila* of 800 camels near Sironj, a Dutch source mentions another of 268 camels and 109 carts travelling from Agra to Surat. The *Banjāra* caravans had up to 20,000 pack oxen. Similarly, for fear of pirates, coastal shipping, especially along the west coast was organized into *qāfilas* of as many as 200 vessels at times. The caravans starting on a relatively modest scale, say, with 150 persons and fifteen to twenty carts, could end up with 1,700 to 1,800 people, 250 to 300 carts, 'besides oxen and buffaloes of burthen', as people joined it for better security along the way. Yet, this was by no means the only way traders travelled. Manrique travelled alone with a few attendants in the guise of a

[1] Mundy [96], I, 99–101; II, 121, 159, 248; Manrique [98], II, 100–2, 105; Fitch [85], 79 (Hawkins); Bernier [102], 233; Tavernier [104], I, 45, 325; Thevenot [103], 48; Manucci [110], I, 68; Jourdain [86], 164.

[2] Mundy [96], II, 368; Fryer [107], I, 279; Ovington [108], 149; Manrique [98], I, 424.

merchant. Mundy's journey from Agra to Patna was also not in the company of a *qāfila*. The author of *Ardhakathānak* travelled with his stock of jewels from Agra to Patna in the company of only two others. On another occasion he travelled to Agra in a group of nineteen. None of these travellers became victims of rebels or highwaymen. It is quite clear from the tone of Banārasī's narration that setting out alone or in the company of only a few was not considered particularly hazardous. The European travellers' continuous reference to fear of brigandage no doubt derived at least partly from an alien's sense of insecurity in a strange land, for the actual instances of their encounters with brigands resulting in the loss of life and property are remarkably few in the context of the overall volume of European trading activities. The real nature of the problem, however, is highlighted in the following description of an incident in 1630 on the Surat–Agra road: '...there were 3 carts *Cutt off from the Caphila by theeves* in *the reere*, and carried cleane away, the people escapeinge, but not without wounds. This happeninge in the night could not be remedied. Besides, the Caphila consisted of such a multitude of carts and people, which *drew to such a length, that hetherto wee could never see both ends from one place...*' (italics mine). The problem in this particular case was one of organization and petty crime rather than any confrontation with determined marauders. Several other incidents throw a somewhat odd light on the nature of crimes on the highways and their implications for trade as well as for law and order. Withington describes an encounter with brigands on the Ahmedabad-Lahori Bandar road when the travellers began to shoot arrows using their camels as a rampart, but were advised by their guides 'not to hitt the ennemyes' who eventually settled for a very small sum and withdrew. Tavernier was advised to take his payment from Shā'ista Khān with a *hundī* on Kasimbazar because if the sailors discovered that one carried money, they were likely to wreck the boat and later recover the silver. Thevenot on his journey from Ahmedabad to Surat was advised to take as escort a *chāran* (minstrel) and his wife whose threats of suicide and self-mutilation usually dissuaded robbers. Banārasī, having blundered into a thieves' village, was offered hospitality by the chief thief on the strength of a *śloka*. Similarly robbers who had captured Badā'ūnī 'immediately submitted themselves' to him as soon as he said that he had just taken his leave from the blessed Shaikh Alm Iṣḥāq. Accosted by brigands near a brigand village, Thevenot's cart-driver offered a *paisa* which was accepted. As the coachman explained 'if the least injury had been offered to him, he would have given the alarm...and...presently he would have been assisted by his neighbours'. One is inclined to agree with the moral drawn by Thevenot from this incident, 'that there was not so great danger upon the Roads, as

some would have me believe'. Even crime operated within a framework of social sanctions and shared values, traders and the public adjusted themselves to a measure of insecurity which often meant no more than a bit of extra expense, not comparable to the systematic exactions by the state. Indeed, the petty functionaries charged with prevention of crime in remote areas were at times the real threat: as Finch put it, 'the foxe is often made the goose-herd'. The level of peace and security was extraordinarily high in parts of the country. In Golconda, for instance, a person with goods or money travelled in perfect security with a governor's *chhap* (signet-stamp) on his wrist and, if he was robbed, he had 'Upon Shewinge that Signet...restitution made'. It was on the sea along the west coast that there was a real threat to trade and travellers from pirates. Besides, during the Deccan War, travellers setting out from the royal court were freely robbed by the Marathas as well as the customs officers. And following Aurangzeb's death, political insecurity plagued many parts of the empire. Gujarat, in particular, suffered heavily from the Maratha inroads. Yet, even during the worst years of the anarchy, trade evidently adjusted itself to the lowered level of peace and security, as is evidenced by the persistently low rate of insurance. It is not certain that the decline of the empire reduced the volume of internal trade, even though certain important lines, like the trade between Gujarat and the north, were adversely affected.[1]

The economy of Mughal India was marked by a curious paradox. Almost certainly, the great majority of the people mainly consumed what they themselves produced or secured from their neighbours on the basis of customary arrangements. It is equally certain, that virtually everyone was involved in exchange as producer or consumer, usually both. Again, as some 50 per cent of the agricultural produce was given as revenue – paid in or eventually converted into cash – and presumably the tax burden on the artisan was comparable, in a predominantly subsistence-oriented economy an incredibly high proportion of the produce was meant for exchange. The paradox is thus explained by the massive extraction of revenue, a job in which the Mughals probably succeeded better than all their predecessors. The range and volume of exchange were correspondingly greater. The producer who surrendered some 50 per cent of his gross produce could have very limited scope for buying anything. Those who as rulers, functionaries, dependants or dealers shared this surplus provided the great bulk of the domestic demand. Mughal peace and the infrastructure essential for the needs of

[1] Della Valle [88], I, 92–3, 121, 143; *Dagh-Register* [38] (1631–4), 44; Mundy [96], II, 43, 45–6, 59; *Relations*, XVI; *Ardhakathanak*, II, 109, 111; Fitch [85], 211 (Withington); Tavernier [104], I, 106–7; Thevenot [103], 19, 20; Badā'ūnī, trans. III, 80; Bowrey [106], 118; Manucci [110], IV, 116; *Mirat*, II, (trans.) 333–4; (text), 377–9.

centralized government provided the framework for the exchange of commodities. There was an ascending scale in the overlapping circuits of exchange from the village through empire to the world of international commerce. Fragmented markets coexisted and interacted with integrated systems of exchange encompassing the sub-continent as did pedlars with merchant princes. The organization of trade at all levels was sophisticated and complex. Trade, both inland and foreign, was not static in purely quantitative terms either. Price certainly, and the volume of trade very probably, were marked by upward trends. In short, the world of inland commerce, like its counterpart in manufactures, was complex, vigorous and even changing. Only, the changes were quantitative and, presumably, of limited magnitude. The increasing demands of commerce, inland as well as overseas, were met comfortably within the existing structures of trade and manufactures. Nothing happened to undermine the impressive structure of the country's traditional commercial organization. No basic innovations occurred. They were not even necessary.

CHAPTER XII

THE MONETARY SYSTEM AND PRICES

MONEY

The Mughal empire could well boast of one of the finest coined currencies in the contemporary world, a tri-metallic currency of great uniformity and purity, with the silver rupee as the basic coin.

Until the reign of Sher Shāh (1540–5), the principal coin in circulation in northern India was the billon *sikandarī*, a copper coin with a small silver alloy, which had developed out of the progressive debasement of the silver *ṭanka* of the Delhi sultans. The silver *ṭanka* had other descendants also, coins of more or less coarse silver, such as the *muẓaffarīs* of Mālwa and the *maḥmūdīs* of Gujarat. The Deccan sultanates also coined billon *ṭankas*. The coinage of the Vijayanagara empire was, on the other hand, based on the *hūn* or 'pagoda', a gold coin. This continued to be coined by the principalities of southern India and the Quṭbshāhī kingdom of Golkonda even after the disintegration of the Vijayanagara empire.

Sher Shāh occupies an important place in the history of Indian coinage, because of his attempt at establishing a coinage untainted by any element of debasement. This was exemplified by his coining of the silver *rūpaya*, or rupee, together with coins of pure gold and copper.[1] But it was really under Akbar that the system was firmly established.

The basic coin, the *rūpaya*, or rupee, weighed 178 grains troy in which the alloy was never allowed to rise above 4 per cent. Akbar's successors continued mintage of this coin, with certain short-lived additional issues of heavier rupees by Jahāngīr. Aurangzeb finally raised the weight of the rupee to 180 grains troy. While the rupee became the principal coin for commercial transactions and tax payments, the Mughals issued a gold coin, *muhr* or *ashrafī* of 169 grains troy; this seems to have been used mainly for hoarding purposes. The coin was practically of unalloyed metal. Finally for petty payments, the Mughals had a copper coinage, based on the *dām* of 323 grains. In 1663–4, Aurangzeb, faced with a scarcity of copper, replaced the older *dām* with a lighter one that was two-thirds of it in weight.

[1] Wright [200], 382–3.

The Mughals issued their coins from a large number of mints throughout their empire. In 1595 copper coins were issued by as many as forty-two mints; the rupees by fourteen mints; and *muhrs* by four.[1] The number of rupee mints increased in the next century, so that Aurangzeb (1659–1707) issued rupees from forty mints in 1700, as against the fourteen mints under Akbar. This was in large part due to the expansion of the empire, but also to an increase in the numbers of mints in the older areas.[2] It was an important achievement of the Mughal administration that it maintained uniformity of standard in the issues from so many mints throughout the country.

The mints worked on the basis of 'free' coinage, i.e. it was open to anyone to take bullion to the mint and get it converted into coin upon a separate payment made to cover minting costs and seigniorage. These charges amounted to about 5.6 per cent of the value of the coins minted. When the treasury issued coins in payments, it recovered these charges through a deduction of 5 per cent, known as *do-dāmī* (amounting to 5.3 per cent of the net payment). Similar rules prevailed in respect of the gold and copper coins as well.

Theoretically, the value of a coin should have equalled its weight in bullion plus the minting charges and seigniorage. In actual fact, the newly-minted coin usually carried a higher value, because of the time it took to get bullion converted into specie at the mints. The Mughal coins were, however, subject to certain discounts on the basis of age. Each coin bore the name of the mint and the year of issue. If it was newly minted (*tāza sikka*), having been uttered in the current or previous year, it enjoyed the full value. The ordinary coins current (*chalanī*) were naturally older coins and thus suffered a small discount. In comparison to these again, the coins minted in the previous reign, called *khazāna*, were accepted at a still larger discount. The total amount of discount did not, however, exceed the minting cost and seigniorage. Coins which lost in weight were accepted simply at the value of their weight in bullion.

Since the Mughal coinage was free, the coins in the three metals naturally fluctuated in value in relation to each other accordingly as the values of gold, silver and copper changed from time to time. The standard ratio of 40 *dāms* to a rupee established during the later years of Akbar could not be maintained after his death, since copper appreciated in value. This led to the conversion of the *dām* of official accounts into a mere notional fractional unit of the rupee, having no real relation to the *dām*-coin. The fractional pieces of the rupee now came

[1] Abū'l Fazl [123], I, 27.

[2] In the area where Abū'l Fazl recorded fourteen rupee mints for 1595, the number of mints had increased to twenty-four. See the statistics for mint issues in: Hasan [359], I, 319–49, especially 332–7, 344–5.

to be based on the small silver piece *āna*, or anna, which was one-sixteenth of the rupee. The anna seems to have come into general use by the reign of Shāhjahān (1628–58).

This change was accompanied or preceded by a more significant development, viz. the replacement of the billon and copper currency by the silver as the basic medium of exchange. During the larger part of Akbar's reign the principal coin in use was the copper *ṭanka* (a double *dām*), and then the *dām*. The *Ā'īn-i Akbarī* (1595) ordinarily gives prices and wages in *dāms*. But prices in the next century are quoted, almost invariably, in rupees. One can see the process in deeds of sale and land-rights. The prices at which such rights were sold are stated in billon and copper coins until the 1580s. The first appearance of the rupee in the sale documents is in 1592–3. But thereafter it becomes the usual medium of payment in such transactions.[1]

The dominant position attained by the rupee by 1600 within the Mughal empire was henceforth challenged only in Gujarat in several of whose ports, the *maḥmūdī*, the old coin of the Gujarat sultanate, now minted by one or two chiefs, continued in use side-by-side with the rupee.

The progress of Mughal authority in the Deccan correspondingly extended the limits of the dominance of the rupee. Following Aurangzeb's annexations (in 1686 and 1687) of Bījāpūr and Golconda together with their south Indian possessions, the rupee, now issued from a large number of the Deccan and south Indian mints, rapidly supplanted the *hūn* (pagoda) in southern India.

Copper coinage was, in the course of time, relegated largely to use in petty payments only. For still smaller payments, cowries imported from the Maldives formed a popular uncoined currency. In Bengal and Orissa where their use was commonest, more than 2,500 cowries went to a rupee, though naturally the rate was subject to fluctuations. In Gujarat imported almonds were used for a similar purpose.[2]

In large transactions, coinage was supplemented, to a considerable extent, by credit money. This arose, as in Europe, out of the development of a brisk use of the negotiable bills of exchange, known in India as *hunḍīs* or *hunḍawīs*. The way in which such paper substituted for coins is described by the author of the *Mir'āt-i Aḥmadī* (1761) in an interesting passage:

Suppose a person having paid a fixed sum at the port of Surat to a *ṣarrāf* (banker) of that place, brings a *hunḍī*, which in Persian is called *sufta*, drawn by him (the *ṣarrāf*) on his partner or agent at Ahmadabad, he may, if he chooses, collect cash, paying the deduction on account of *ānṭh* (conversion of bill-money into

[1] Habib [347], 217–9.

[2] Much of this account of the Mughal currency system is based on: Habib [341], 1–21.

coin), or in case another person has a claim against the possessor of the bill (*hundawī*) for that sum, he may give it to that person, and free himself from that obligation. Similarly, he (the new holder of the bill) may transfer it to another, until it reaches a person against whom the drawee of the *hundawī* has claims, and who, therefore, surrendering it to the latter, relieves himself of his debt. But cash is not used throughout.[1]

In 1651 at Agra the deduction on account of *ānṭh* amounted to 1 per cent only.[2] When in 1715 the *ṣarrāfs* at Ahmadabad raised it to 20 per cent (probably a copyist's error for 8 per cent), for the pretended reason of 'scarcity of cash', the merchants nearly took to arms, and a reduction in the discount was secured.[3]

The fact that the *ṣarrāfs* also accepted deposits at interest,[4] naturally facilitated the development of a credit money that existed only in their books. Early in the nineteenth century, Malcolm describes how the bankers accepted accommodation bills (which he significantly styles *ānṭh*) from the drawers. They entered the amounts in their books at interest, and permitted the bills to be transferred, but did not give the holders the right to enforce cash payment. Thus a large amount of book money could be created without any backing in coin or bullion, but only on the strength of the general credit enjoyed by the *ṣarrāfs*.[5] One can be sure that the amount of money created by *ṣarrāfs* by exchanging bills for bills and by transfers of book credit was quite large. But as our evidence now stands, it is impossible to estimate even approximately its size in relation to total coinage.[6]

MONEY IN CIRCULATION

Since the silver rupee was the basic currency in the seventeenth century, the amount of currency in circulation was determined essentially by the number of rupee coins minted. Furthermore, since Mughal coinage was 'free', the changes in the amount of currency in circulation must have been caused mainly by the supply of silver. India having no silver mines worth the name, the supply came entirely from imports. The quantities of silver imported grew immensely during the sixteenth and seventeenth centuries as a result of the large amount of silver obtained from the Spanish mines in the New World. In 1784 James Grant estimated that had the imports 'in the century succeeding 1582...been thrown into the general circulation', it would have tripled 'the existing stock of gold and silver currency', without allowing, however, for hoarding.[7] Since

[1] *Mir'āt-i Aḥmadī* [167], I, 410–1.
[2] Foster [31] (1651–4), 105.
[3] *Mir'āt-i Aḥmadī* [167], I, 410–1.
[4] Foster [31] (1642–5), 303.
[5] Malcolm [402], II, 90.
[6] For the system of bills of exchange and credit, see: Habib [343], 1–20; Habib [352], 290–303.
[7] Firminger [298], III, 49–50.

the actual volume of silver imports is as hard to establish as the total amount of currency at the close of the sixteenth century, Grant's estimate would have remained unconfirmed, but for an ingenious method adopted to estimate the relative silver currency output of the Mughal empire from a quantitative analysis of the surviving coins.[1]

Aziza Hasan counted all the rupee coins and their fractional pieces recorded in the catalogues of the major collections by the years of their issue, but confining her count to the issues of north Indian mints. She showed that the year-wise fluctuations in the numbers of the coins in the individual collections closely coincide; and this coincidence can only be due to a single factor, viz. the actual variation in the quantity of coins minted in the Mughal empire each year. Furthermore, upon constructing a histogram of coins, taking five-year class-intervals, Hasan found that this matched to a remarkable degree Hamilton's well-known histogram of the imports of American treasure (overwhelmingly silver) into Spain, with gaps of just five to ten years. This suggested that the Indian currency output was being determined to a very large extent by the quantities of silver imported from America into Europe and dispersed thence, at least down to 1650.

Hasan made two further assumptions in order to reconstruct a silver-money in circulation curve from the curve of annual coin output. We have seen that the rupee did not become the principal medium of payment by the 1590s. Hasan, therefore, counted all catalogued rupee issues of the period 1556–91 (ignoring those of the Sūr dynasty, 1540–56, to allow for remintage during 1556–91) and then assumed that the total represented the amount of silver-money in circulation about 1591, relative to the totals of subsequent catalogued annual issues. To this basic amount, she successively added the number of catalogued coins of each year so as to obtain the total relative quantity of silver money in circulation in each year. But since such a procedure would not allow for remintage, she made a deduction of 2½ per cent from the total number of coins of each year, before adding the number of coins minted in the following year.

The silver currency-in-circulation curve that Hasan built up shows that Grant was remarkably accurate in his estimate of the expansion of silver coinage in India. During the period 1591–1639, the curve of rupees in circulation climbed to a level over three times higher than the level of 1591. After 1639, it began to descend, until in 1684 it was at a level which was a little more than twice higher than that of 1591. After

[1] See: Hasan [358], and *IESHR*, VII (1), 150–60. Her method has again been criticized, now by John S. Deyell in *IESHR*, XIII, No. 3, 393–401; but the non-representation of a large number of coin-types in different collections suggests that Deyell's argument notwithstanding, the quantities of coins issued from different mints and in different years are reflected in the holdings of the museums.

1684 there was an ascent again; and after 1700 it remained at levels well over three times the amount in circulation in or about 1591.

We have already referred to the close correspondence between the import of American treasure into Spain and the silver currency output of the Mughal empire, a fact suggesting that the expansion of currency supply was largely based on the increase in silver imports. Almost the entire silver imported was turned into coin, as is established from general statements of contemporaries as well as from the records of the disposal of its silver by the English East India Company.[1] This is also corroborated by the heavy output of the mints of the north-western region and Gujarat (where imported silver was brought first of all) in comparison to the inland mints.[2] That apparently little of the increase in the stock of silver from imports went into hoarding may be explained by the continuous appreciation of gold in respect of silver (see below), making gold rather than silver the more profitable metal for hoarding. Imported gold, says Tavernier, was seldom made into coin, but was sold to goldsmiths.[3] Now this does not mean that all the stock of silver, held in ornaments, utensils, etc. was converted into coin, but only that the proportion of the hoarded silver to the total must have declined sharply. These considerations suggest that a three-fold increase in silver currency need not imply a three-fold expansion of the total stock of silver in the country. If at the initial point, 1591, the stock of silver consisted, let us say, of two parts hoarded silver, and one part coined, and if subsequently the coined part trebled owing entirely to imports, whereas the hoarded part remained fixed (neither added to by imports nor reduced by mintage), then the stock of silver in the country would have really increased by two-thirds only.

The increase in money in circulation should, according to the quantity theory of money, have correspondingly raised prices if the other factors, namely the supply of commodities and the velocity of money, remained constant. The latter assumption, however, cannot easily be accepted. Surely, the GNP of the country must have increased, even if slowly. Supposing the per capita product remained the same, and the population increased at the very low rate we have suggested, viz. 0.14 per cent per annum, the GNP should have increased between 1600 and 1700 by about 15 per cent. This in itself would reduce a three-fold increase in currency in absolute terms to an increase of 2.6 times only per unit of GNP. However, even this reduction is not enough, since the factor of supply was not then determined by the GNP, but by the actual marketed produce. The size of this may vary in

[1] See the references in: Habib [342], 4–5 and note.

[2] See: Hasan [359], 328–330, and the tables on 338–43, 346–7.

[3] Tavernier [104], I, 15. The statement applies to the Mughal empire, not southern India.

proportions different from those of the GNP. As we have seen in an earlier chapter, the tendency in the Mughal revenue system was towards collection of the land revenue in cash. If, therefore, there was an expansion of the domain of cash nexus under the Mughal administration, then the peasantry would have had to market a larger and larger portion of the agricultural produce as years passed by. The growth of towns would have aided the process. In such circumstances, commodity supply must have grown at a higher rate than the GNP. In other words, a very large amount of the increase in the money in circulation would have been absorbed by the expansion of the market. Whether velocity also increased, so as to countervail this absorption, is a debatable matter. Upon the assumption that there was a significant expansion of the credit system and bill money, one may concede an increase in money velocity. But, again, the precise extent of such increase remains obscure. Therefore, while one would say that the increase in money supply on such a scale as to imply a rise in price levels during the sixteenth and seventeenth centuries is beyond question, the actual degree of the ascent of the price level over the period cannot be established without a scrutiny of the available data of the prices of at least some important commodities.

GOLD

There are some commodities which, for different reasons, may be taken to offer good indices of the secular movements of the general price-level. First, gold and copper: these were themselves currency metals, and the data on their silver prices are abundant in the form of rupee rates for the *muhrs* and *dāms*. Owing to their lightness, transport costs entered into their prices to a small extent only, so that regional variations within the Mughal empire (particularly in the case of gold) may practically be ignored. This enables us to construct time series for their prices with some degree of confidence. At the same time, since we have some information about the conditions of their supply, we are in a position at least to speculate upon how far the price changes reflected the demand-supply situation of the two metals themselves, and how far they reflected changes in the purchasing power of the silver money.

Table 9 gives the silver value of gold (weight for weight), based on the available *muhr*-rupee rates prevailing in the market.

When one compares the data in Table 9 with the graph of gold:silver ratios in Europe, especially the average worked out for Europe by Braudel and Spooner,[1] one finds that the silver price of gold in India was lower than in Europe near the close of the sixteenth century, but that it caught up with the European level by 1650. It went

[1] Rich and Wilson [249], 459.

Table 9. *Silver value of gold, 1583–1758**

Year	Silver price of gold (gold, 1 unit)	Year	Silver price of gold (gold, 1 unit)	Year	Silver price of gold (gold, 1 unit)
1583	9	1675?	15	1728	12.25 to 12.50
1595	9	1676	11; 12	1730	12.50; 12.62
1608–12	10	1677	13.75; 13.88	1731	11.50; 11.88
1615	10.70	1678	12.81; 13	1732	12.25
1621	10	1679	12.88	1733	12.56
1626	14	1680	12.25; 13	1734	12.50; 12.75
1628	12.75; 13	1684	12.38; 12.50	1735	12.50 to 12.88
1633	12.50	1688	12	1736	12.62; 12.75
1640	13	1690	14	1737	12.63
1641	14	1695	13.25	1738	12.75
1644–5	14	1697	13.13	1739	12.75
1653	14	1711	14.50; 15.50	1741	13
1658	16.40	1715	11.88; 12.00	1745	13 to 13.19
1661	14.63	1720	12	1746	13.25
1662	15; 15.50	1721	11.50; 11.75	1749	13.25
1664	14.94; 15	1722	11.75	1750	14.25
1665	15	1723	12	1755	14.25
1666	16	1724	11.50	1757	14
1670	15.13; 15.25	1727	12.19 to 12.62	1758	14; 14.12

* The table is based on the following: (a) Habib [343], 384–7; (b) Chaudhuri [268], 113; (c) Hasan and Gupta [364a], 358; and (d) a list of rupee rates for *muhrs* for various years based on documents from eastern Rajasthan, furnished to me very kindly by Dr S. P. Gupta. While the prices of the seventeenth century are largely drawn from (a), the prices of the eighteenth century are equally largely based on (d). Rates for the same years in the various sources are usually found to corroborate each other pretty well.

The *muhr* weighed 169 grains troy and the rupee 178; under Aurangzeb the weights were increased respectively to 171 and 180 grains. Since the *muhr* was practically pure gold, while the rupee contained alloy up to 4 per cent, the weight of silver in the rupee was probably only slightly in excess of that of gold in the *muhr*. In the table we have therefore assumed that the number of rupees to a *muhr* represented the number of units of silver that would be equivalent in value to one unit of gold. The margin by which this understates the real silver price of gold is so slight that it can be overlooked without much risk of inaccuracy.

higher subsequently; but a decline brought it approximately at par with the price in Europe in the last years of the seventeenth century. Thus the silver value of gold in India rose by over 50 per cent between 1595 and 1650; it exceeded the 1595 rate by over 75 per cent before 1675; and, finally it found a level around 50 per cent higher than that of 1595 near the end of the century.

This increase took place in spite of a large influx of gold into India.

No quantitative estimate of this influx can be hazarded. Much of the gold which came was part of the Spanish imports of American treasure; some also came from west Africa and some, after 1650, from Japan. There was also indigenous production mainly from river sands; but its quantity could not have been large. Braudel and Spooner almost certainly underestimate the increase in the total stock of gold, when they put the addition between 1500 and 1650 at just 5 per cent for Europe. They make their estimate by means of two equations[1] based on the change in the bimetallic ratio in Europe from 1:10.5 to 1:14.5, and on Hamilton's figures for the official Spanish imports of treasure from America (181.3 tons of gold and 16,886.8 tons of silver). Rather surprisingly they give no weight in their second equation to the enormous outflow of gold and silver from Europe, which can by no means be balanced by overlooking gold imports from Guinea and Mozambique or Europe's silver production.[2] So long as this outflow is ignored, Braudel and Spooner's equations must apply to the entire Old World, and not just Europe alone. But to be serviceable for this purpose, the initial bimetallic ratio must be altered to, say, 1:9.75, in view of the lower silver price of gold prevailing in the East in the sixteenth century. Moreover, to allow for supply of gold from sources other than America, the addition to gold stock should be put at about 300 tons. Similarly, the addition to silver ought to be raised to something like 21,500 tons, to include additions from such sources as central Europe and Japan.[3] These emendations would result in our getting the figures of 3,611 tons of gold and 35,203 tons of silver for the stock of the entire Old World in 1500, as against the figures of 3,564.5 tons of gold and 37,427.3 tons of silver deduced by Braudel and Spooner for Europe alone. The proportion by which the stock of the Old World in or about 1500 was increased during 1500–1650, would then be about 8.3 per cent for gold and over 61 per cent for silver.

Not only would such estimates still remain very tentative, but it is also most unlikely that the stock of treasure in either metal grew by the same percentage in all parts of Europe and Asia. India, which

[1] The equations are: $10.5\,x = y$; and $14.5\,(x + 181.3) = y + 16{,}886.8$, when x is the stock of gold in 1500 and y, the stock of silver (Rich and Wilson, eds. [249], 445–6).

[2] Quantitative data on the outflow of treasure, west African gold imports and Europe's own silver production are conveniently summarized by Parker [300], 527–9.

[3] Obviously, the additions to Hamilton's figures are arbitrary. They are, however, likely to be underestimates than overestimates. Parker [300], gives an estimate of over 100 tons of gold imported from Mozambique into Europe during the seventeenth century and over 17.5 tons imported from west Africa between 1485 and 1520. Thus an addition of about 120 tons to cover gold originating in Africa, as well as in Japan, and from the mines and rivers of the Eurasian continent would not be unreasonable. Similarly, with European silver production at around 70 tons per year during 1526–35, and at 20 tons towards the close of the century, it is probable that the Old World silver production supplied 4,500 to 5,000 tons of silver during the period 1500–1650. (All tons metric.)

heavily imported silver and hardly sent any out, must have had its supply of silver augmented to a much greater degree than some other countries.

There is the further difficulty that we do not know how much of the gold and silver influx occurred during the sixteenth century, since our own record of bimetallic ratios begins with only 1583. However, we may probably not be far wrong if we suppose that between 1595 and 1666 the gold supply was augmented by about 10 per cent. Since the silver price of gold went up by 77.7 per cent, we must assume that there had been a sheer fall in the intrinsic value of silver by 50 per cent, implying a doubling of the general price level in terms of the rupee during this period.

Subsequent to 1675, the silver price of gold underwent two descents, both attributable to an increase in its supply. The 'crash' of 1676 was caused not by the dishoarding of the imperial treasure by Aurangzeb,[1] but by the large imports of Japanese gold.[2] The fall in the silver price of gold shown in Table 9 between 1711 and 1715 was similarly due to a spurt in Brazilian gold-production at the close of the seventeenth century. The lower price of gold continued until the mid-1730s. Thereafter it began to appreciate again, and by 1750 it had reached the same level in relation to silver as had prevailed in and before 1711. This, in the face of considerable expansion of gold supply, suggests that the general purchasing power of silver must have registered a very steep decline during the first half of the eighteenth century, in order to have outstripped the fall in the price of gold.

COPPER

The movement of silver price of copper can be traced in the *dām* rates for the rupee. Table 10 presents the silver value of copper so determined, with the 1595 price (from the *dām*: rupee ratio of the *Ā'īn-i Akbarī*), as base = 100.[3]

Table 10 shows that copper began to appreciate only after 1614; the ascent continued, with some fluctuations, to the early 1660s, when its

[1] Foster's communication in *JRAS*, 1925, pp. 314–16.

[2] Glamann [316], 56, 63. The Dutch exports of gold from Japan reached their peak in the 1670s and declined abruptly thereafter.

[3] The table is based on the information brought together in Habib [343], 387–92, until 1666, except that the 1637 price for Agra represents the average of rates quoted in Brij Narain [437], 19. All the east Rajasthan prices are based on Gupta and Moosvi [339a], 191–2 (table). The *ṭaka* represented the old *dām* of Akbar, and not the lighter *dām* of Aurangzeb. I owe this information to Dr S. P. Gupta, who says that in *nirkh bāzār* documents of *qaṣba* Pragpur of Samwat 1793 and 1794, a rupee is rated at 15 *ṭaka pakka*, and also 25 *ṭaka Naurangshāhī* or 'Ālamgīrī. This difference in value represented the difference in the weights of the old standard *dām* and Aurangzeb's lighter issues. The 1719 rates for Agra and Delhi are based on the rate given in: I'timād 'Alī Khān [20], ff. 138b, 139a. The rate is stated in '*Ālamgīrī dāms* per rupee.

Table 10. *Silver value of copper, 1595–1750* (E.R. = East Rajasthan)

Year	Silver price of copper	Area	Year	Silver price of copper	Area
1595	100	Agra	1714	222.4	E.R.
1609	100	Gujarat	1715	232	E.R.
1614	95	Gujarat	1716	225.2	E.R.
1614	100	Gujarat	1717	219.2	E.R.
1626	133	Agra	1718	223.6	E.R.
1628	161	Gujarat	1719	222.4	E.R.
1633	160	Gujarat	1719	200	Agra
1634	166	Sind	1719	250	Delhi
1636	148	Gujarat	1720	229.2	E.R.
1637	153	Agra	1721	228.4	E.R.
1638	138	Agra	1722	235.2	E.R.
1656	179	Sind	1723	246	E.R.
1659	167	–	1724	240	E.R.
1661	267	Deccan	1725	250	E.R.
1662	250	Gujarat	1726	250	E.R.
1662	276	Deccan	1727	250	E.R.
1664	227.2	E.R.	1728	259.6	E.R.
1665	247.2	E.R.	1729	270.8	E.R.
1666	235	Gujarat	1730	250	E.R.
1666	242.4	E.R.	1731	250	E.R.
1677	228.4	E.R.	1732	270.8	E.R.
1684	217.4	E.R.	1733	269.2	E.R.
1685	213.2	E.R.	1734	270.8	E.R.
1686	200	E.R.	1735	270.8	E.R.
1687	197.2	E.R.	1736	285.6	E.R.
1688	210.4	E.R.	1737	262.4	E.R.
1689	217.4	E.R.	1738	260.8	E.R.
1690	217.4	E.R.	1739	266.8	E.R.
1693	200	Gujarat	1740	260.8	E.R.
1694	205.2	E.R.	1741	266.8	E.R.
1695	222	Gujarat?	1742	262.4	E.R.
1695	205.2	E.R.	1743	266.8	E.R.
1696	205.2	E.R.	1744	260.4	E.R.
1697	205.2	E.R.	1745	268.8	E.R.
1706	210.4	E.R.	1746	271.2	E.R.
1709	228.4	E.R.	1747	266.8	E.R.
1710	235.2	E.R.	1748	269.6	E.R.
1711	224.2	E.R.	1749	285.6	E.R.
1712	228.4	E.R.	1750	285.6	E.R.
1713	228.4	E.R.			

silver price had gone up to more than 2.5 times what it was in 1595. A slow decline set in after 1662; and by the end of the century the price was just a little over double the 1595 price. The first half of the eighteenth century saw a gradual rise again until by 1750 copper achieved some stability at a level above the one attained in the early 1660s. In Europe, the silver price of copper had increased continuously from about 1520 to 1620, whereafter, until 1760, it remained largely at the level attained about 1620.[1] In other words, copper in Europe began to appreciate in value almost a hundred years before it did so in India; and the ascent almost ended there some forty years earlier.

In trying to deduce the general value of silver money from the data for copper, we should remember that during the sixteenth and seventeenth centuries, no sensationally cheap sources, either through spoliation or use of servile labour, were discovered for copper, as they had been for silver and gold. Copper production expanded mainly in response to demand, whether in Sweden, central Europe, Japan or the Indian mines in Rajasthan. The law of diminishing returns accordingly must have operated to a very large degree in copper production. As demand expanded, the real cost of supply of each unit was bound to rise. The demand itself increased partly because of the increasing use of artillery with its bronze cannon. By 1650, the bronze cannon was becoming obsolete in Europe (losing place to iron guns), but not in India. Copper also served for vessels, and utensils, and for the ornaments of the poor. It is possible that the copper price remained stable in India in the latter half of the sixteenth century, only because copper currency was being replaced by silver. Once the process of replacement ended, copper prices in India rapidly rose to the 'international' level. Since there was probably an element of real rise in the cost of copper production, the increase in the silver value of copper cannot entirely be ascribed to a rise in the general price-level. One can, therefore, take the silver price of copper as broadly the ceiling for the increase in the general price level, at any rate from the 1620s to about 1700. In other words, since copper rose by 1662 to over 2.5 times the 1595 price, the increase in the general price-level should have been marginally lower. While thus the movement of the copper price is consistent with a doubling of prices by the early 1660s, and then the maintenance of this level thereafter, it rules out any greater increase of prices during the seventeenth century. The spearheading of the general prices by the price of copper probably ceased in the eighteenth century with the rapid decline in the use of copper cannon the world over; and it is possible that a relative decline of the value of copper now set in.

[1] Braudel and Spooner's table in: Rich and Wilson, eds. [249], 460.

FOODGRAINS

The prices of foodgrains, especially of rice and wheat, may theoretically be the best index of the movement of the general price-level, because of the fact that in a mainly agrarian economy, these determine to a very large extent the costs and prices of all other commodities. But in actual fact, there are many difficulties in using price data of the foodgrains for this purpose.

The first difficulty is that our information generally consists of chance references to prices at different localities for different years. Official price-reports have unluckily not been explored systematically enough to enable us to compare grain prices at any one market for the same month for a series of years. Eastern Rajasthan offers an exception. But the published work on price information offers an unbroken series from 1708 only; though the data begin with 1665, there is no information for a number of intervening years.[1] Then there is the further difficulty that agricultural production is subject to great fluctuations, with consequent effects upon agricultural prices; so that secular trends are often submerged under these violent transitory price ascents and descents.

With all these obstacles in mind, we can still make an attempt. As a baseline for Agra we may take the *Ā'īn-i Akbarī* prices, which presumably apply to that city and are true for 1595. Then we have prices by the month recorded by the Dutch factory during 1637 and 1638. So far as we know 1637 was a normal year, but prices early in 1638 showed an exceptional rise owing to a failure of the winter rains. Finally, a chronicler recorded the Agra prices of March 1670, with much satisfaction, suggesting that they were especially low. Table 11 compares (a) the *Ā'īn-i Akbarī* (1595) prices with the averages of monthly prices in 1637 and 1638 at Agra; and (b) the March prices of the years 1637, 1638 and 1670 at Agra. All prices have been converted into rupees per *man-i Shāhjahānī*.[2]

These figures would suggest that foodgrain and *ghī* prices doubled between 1595 and 1637. Ignoring the March 1638 prices, which were probably abnormally high owing to crop failure (compare the difference in increase of grain and *ghī* prices between 1637 and 1638), we can detect an increase of about 15 to 20 per cent between 1637 and 1670. The result is that, although 1670 had a good winter season, the prices then were about 230 per cent of the 1595 prices.

For tracing long-term agricultural price movements after 1670, we can have recourse to the data from Rajasthan. Here the amount of tax

[1] The data are presented in: Hasan and Gupta [364a], 350–71; Gupta and Moosvi [339a], 183–94.

[2] The tables are based on the information in: Habib [343], 82–3; Moreland [425], 152–4.

Table 11 (a). Ā'īn-i Akbarī *prices with monthly averages in 1637 and 1638*

	1595	1637	1638
Wheat flour	0.50	1.09	1.69
Gram	0.27	1.05	1.70
Ghī (clarified butter)	3.50	8.53	9.73
Moth	0.40	1.04	1.47

Table 11 (b). *March prices in 1637, 1638 and 1670 at Agra*

	1637	1638	1670
Wheat flour	1.00	1.63	1.25*
Gram	1.00	1.82	0.95
Ghī	8.46	8.57	10.00

* The wheat flour price for 1670 is based on the wheat price (which was Rs. 1.14 per *man-i Shāhjahānī*) with allowance of a 10 per cent reduction in weight upon conversion to flour.

paid on each crop enables a weighted price index to be constructed.[1] With the 1715 price as base = 100, the prices for 1665 and 1669 are indexed at 34.93 and 38.11. The indexed price for 1677 is 60.57. From the decade 1684–93, prices for seven years are available and the average index of these works out at 45.93, with the maximum at 55.77 and minimum at 31.84. The nine years within the decade 1706–15, however, produce an average of 92.06. This may partly be because 1712 was a year of great scarcity (index, 207.68), but in fact the subsequent years continue to exhibit these high levels, at least down to 1750, when the indexed series ends. In these thirty-five years the price falls below 75 during six years only, whereas in the twelve years of the period 1665–1700, of which prices are recorded, the indexed price falls below 40 in as many as three years and rises above 75 only in one year. These data suggest that in eastern Rajasthan agricultural prices showed little increase between 1660s and 1690s, but registered a sharp rise during the second decade of the eighteenth century, and from then on they maintained a level more than twice that of the last quarter of the seventeenth century. The fact that prices rose dramatically during the reign of Farrukhsiyar (1713–9) is also recorded by a chronicler. He says that the prices at Delhi rose to unprecedented heights at the beginning of the reign, but declined a little after 'a year or two', to Rs. 5 per maund

[1] See Gupta and Moosvi [339a], 190–1.

for wheat, and then towards the end of the reign, to about Rs. 4. It is noteworthy that he quotes this last price (Rs. 4 per maund) as prevailing at Delhi during an acute famine in 1694–5; so that the rise in the general price-level since then must have been very great.[1]

Any conclusions from these data alone are naturally valid only for the region of Agra and the adjoining region of eastern Rajasthan. Besides this, the very great weaknesses of the evidence for Agra and the lacuna in the series for eastern Rajasthan must leave some doubt about the extent to which these conclusions can be accepted even for these regions. But the information still has corroborative value; and must be accepted until further researches into agricultural prices of the seventeenth century offer us something better.

SUGAR AND INDIGO

Quotations for sugar prices found in English commercial literature, when compared with the *Ā'īn's* prices (1595), suggest that while there was no rise in the sugar price in the inland regions of northern India until 1615, it rose to almost 140 per cent by the 1630s, and the higher level was maintained until 1651, whereafter quotations are not available. In Gujarat, the sugar price nearly doubled in the 1620s, and continued its ascent into the 1630s, undoubtedly aided by the 1630–2 famine.[2]

The information for indigo prices is much more detailed. There were two important varieties, the Bayāna indigo (grown near Agra) and the Sarkhej (near Ahmadabad, Gujarat), which entered international trade and formed valuable items of export from India. The Bayāna indigo prices show a very considerable rise from the maximum price (Rs. 16 per *man-i Akbarī*), quoted for it in the *Ā'īn-i Akbarī* (1595). During the second and third decades of the seventeenth century, the price fluctuated at around the *Ā'īn's* figure. A sudden rise in the early 1630s was followed by a gradual decline thereafter, but right through the 1640s and 1650s, it remainded at a level distinctly above that of the 1620s. Early in the 1660s there was an enormous upswing; and though a fall soon occurred, it was still about three times the 1595 price. Price data are unluckily not available for the subsequent period.[3]

The price history of the Sarkhej indigo during the first half of the seventeenth century has been studied by Moreland.[4] At first sight his table appears to justify his inference that the price of Sarkhej indigo largely remained stable throughout the first part of the seventeenth

[1] Yaḥyā Khān [166], ff. 108a–b, 122a. Cf. 1719 prices at Agra and Delhi in: I'timad 'Alī Khān [20], ff. 138b, 139a.

[2] Habib [343], 84–5. Also see: Hasan [358] (VI (1)), 103, 108 and note for sugar prices in Gujarat.

[3] Prices for the Bayāna indigo are set out in: Habib [343], 86–8 and note.

[4] Moreland [424], 160–4.

century. But a closer scrutiny shows that this is largely because he has assumed as the 'standard price' (Rs. 18 per Gujarat maund) prevailing before 1609, what in fact is a price rather casually said in 1613 to have prevailed some time earlier. The price reported in 1609 (Rs. 10 to Rs. 12) was, in fact, much lower than this price. Moreover, Moreland's 'standard' price happens to be 1.8 times higher than the *Ā'īn-i Akbarī's* maximum price for Bayāna indigo; though the Sarkhej variety was not as fine as the Bayāna and normally fetched a lower price. One would then assume either that the Sarkhej price doubled itself between 1595 and 1609, or that what Moreland took as standard was but a rate fleetingly attained just once before 1613. If we take the latter view and assume the 1595 Sarkhej price to have been lower than the maximum for the Bayāna variety (i.e. less than Rs. 10 per Gujarat maund) we can see, in Moreland's own table, a gradual rise in the price until 1619, by which year it had risen more than 1.5 times. The 1620s witness a trough, followed by a substantial ascent in the 1630s. In the next decade the price tends to decline but seems ultimately to reach a level that was about double of what probably prevailed in 1595.

THE GENERAL MOVEMENT OF PRICES

The information about the movement of prices of individual commodities can undoubtedly be enlarged. Research properly directed may enable us to present really satisfactory series of prices of goods in particular localities. It would be helpful if the coverage could be extended to cotton and textiles of various varieties. These matters are, however, for the future. For the present we must naturally draw our conclusions from what we happen actually to possess.

It would seem that the evidence studied suggests some broad secular trends in the general movement of prices. One great rise appears to have come largely between 1610 and the mid-1630s, with the price level rising by one-and-a-half and two times of what it was in 1595. This is seen particularly in the agricultural prices at Agra, and the prices of Gujarat sugar and the Bayāna and Sarkhej indigo; the rise occurs on a lower scale in prices of gold, copper and north Indian sugar. This largely corroborates Aziza Hasan's curve of silver currency in circulation which expanded by about three times precisely in the period 1592–1639. The early 1660s registered another peak, after a slight decline. Gold and copper prices climbed to very high levels, and there was also a dramatic rise in the price of the Bayāna indigo. This was indeed recognized as a period of scarcity and high prices by contemporaries.[1] The fall in agricultural prices at Agra recorded in 1670 still meant that corre-

[1] Habib [343], 106–7.

sponding prices were at a higher level than in the late 1630s. Both gold and copper subsequently registered some decline in their ratio with silver, but, on the whole, some stability in the general price-level was maintained until about 1710. This is also attested to by the agricultural prices of eastern Rajasthan. These, together with other evidence, suggest a great rise in agricultural prices during the second decade of the eighteenth century, resulting, even after the following inevitable decline, in a level which stood throughout the remaining part of the first half of the eighteenth century at about double that prevailing around 1700. The scale of the rise in the price level was reflected only partially in copper, whose silver price increased by about 40 per cent during the entire fifty years. Aziza Hasan shows a steady decline in silver currency in circulation between the 1630s and 1680s, and a large expansion after 1685 which continues right up to 1706, when her data cease. It may well be that the stability of prices between *c.* 1665 and *c.* 1710 is connected with the decline in currency supply and the subsequent rise in the years following 1710 is partly the cumulative effect of the increasing currency supply that began some twenty-five years earlier.

In the light of experience of modern capitalist economies, the doubling of prices during the first sixty years of the seventeenth century, and a doubling again during the first fifty years of the eighteenth century, would hardly merit the designation of inflation. An increase in prices to a level four times the level at the beginning, over a span of 150 years, would give an annual rate of increase of 1.93 per cent only. But in pre-capitalist economies, such a long process of price increase working itself out in the midst of great annual fluctuations must have been a very unsettling factor. The price increase that occurred in Europe on the same scale, but earlier (sixteenth century), is recognized by most historians to have been of critical importance in the pre-history of capitalism. One cannot, therefore, assume that the 'price revolution' in India left its economy unaffected.

CREDIT AND INTEREST

A general long-term rise in prices cannot but exercise considerable influence on the supply of credit and the cost of borrowing. As an abstract statement this may be accepted as axiomatic. It is less easy to see precisely how the influence is really felt in an economy. Taking the Mughal economy, one can say that, since the value of silver steadily declined – and so too, that of gold, though to a lesser extent – hoarding in precious metals would have meant a very great amount of loss to the hoarder. We have suggested that very little of the new imported

stock of silver went into hoarding. In such circumstances we can assume an increasing tendency among the wealthy to lend at interest rather than convert their wealth into a hoard. Such a tendency could have meant a real increase (i.e. an increase on a scale greater than that of money supply) in money capital; and this, without a change in the demand curve for credit, should, in turn, have caused a fall in interest rates. But, on the other hand, a continuous 'inflation' might create extra profits for merchants, who found the price level higher when they sold a commodity than when they had purchased it. With expectations of such profits, merchants might be willing to borrow at higher rates than before. However, with an 'inflation' rate of barely 2 per cent per annum during the entire period, the extra profits of the merchants from this source could not have more than marginally affected interest rates.

A cheapening of credit might, therefore, have taken place, and our information shows that there was a distinct fall in the interest rates in the middle of the seventeenth century. According to the records of the English East India Company, the rate of interest in commercial loans at Surat was 1 per cent per month or above until 1650; but from 1651, it flucturated between ½ and ¾ per cent. At Ahmadabad a rate belonging to the lower range was quoted in 1647. In Agra, until 1645, the rate at which commercial loans were advanced had been fluctuating between 1 and 2½ per cent; but a substantial fall in the rate occurred this year, and henceforth it was either ¾ per cent per month or less. In the Golconda kingdom, much higher rates (2 to 3 per cent) prevailed until before 1645; but during this year and later, the rate declined to 1½ per cent per month and less. Even after the fall in interest rates, the cost of credit at Surat (7½ or 9 per cent per annum) in 1659 was said to be double the rate in England (4 per cent).[1] The fall in the interest rates was probably a worldwide feature of the time.

If commercial credit cost less, one may suppose commercial capital to have grown and mercantile operations to have been correspondingly enlarged. This would also conform to our inferences about the development of commerce drawn from the shift to the cash nexus in revenue payments and the growth of towns.

[1] See: Habib [345], 401–5. The rate under Agra for the year 1628 should read 2 per cent. The rate of 3 per cent per annum reported by the English from Surat in 1617 was probably exceptional. I should like to withdraw the suggestion made in my article that the rate of interest had been falsely inflated by the English factors in the earlier years, and fell later only because the English Company improved its control over its factors' accounts and transactions.

WAGES

Hamilton's data showing that in sixteenth- and seventeenth-century Europe prices rose much faster than wages, naturally lent great force to the suggestion that an important source of the formation of the future industrial capital lay in the extra profits gained by the class of manufacturing employers from the continuous fall in real wages. The information on wages in India during the seventeenth century has not so far been gathered in any profusion. The *Ā'īn-i Akbarī* (1595) is rich in the wage rates it gives for various labourers, skilled and unskilled; but similar comparable data for any subsequent year are wanting.

However, the accounts of the Dutch factory at Agra in 1637–8 enable us to make a comparison with the *Ā'īn-i Akbarī*'s wages. The servants or peons were now paid Rs. 3 and Rs. 3.5 per month, while the unskilled labourers were paid 2 *dāms* per day.[1] The *Ā'īn*'s lowest wage for unskilled labourers seems to be 2 *dāms* per day (though the wages of some attendants reach 3 *dāms*). The monthly wages of 1637–8 thus show an increase of 67 to 100 per cent above the *Ā'īn*'s rate. The ordinary labourer's wage remaining stable at 2 *dāms*, rose by the same proportion as the silver value of copper, i.e. by 38 to 53 per cent. Since grain prices during the same period (1595–6 to 1637–8) rose by over 100 per cent, it is difficult to escape the conclusion that the real wages of the lowest-paid workers suffered a marked decline. If such was the case, the favourable picture that Ashok Desai draws of the standards of consumption of the wage-labourer of 1595 from a comparison of the *Ā'īn*'s data on wages and prices,[2] must already have been a thing of the past in 1637.

Another set of data comes from Gujarat, and relates to the monthly wages paid to the 'peons' by the English at Surat. These are given in table 12.[3]

Since the increase in prices in Gujarat occurred earlier than in the inland regions, the 1616 wage cannot be taken as the one prevailing when the ascent in prices began. Supposing the 1616 wage to have already risen by 33.3 per cent above the 1595 level, the wages by 1690 should have been about 225 per cent of what they were around 1595. This shows that money wages moved substantially upwards during the course of the seventeenth century; but to what extent they lagged behind the rise in prices, in the long run, can only be answered when better statistics become available.

[1] Moreland [425], 149, 159–60.

[2] Desai [285], 44–5. The possibility canot be ignored that the *Ā'īn-i Akbarī*'s wages being those of employees of the imperial establishment were a little higher than those prevailing in the 'market'. On a very rare occasion when it quotes wages in the imperial establishment as well as elsewhere, viz. in the case of grooms, the wages of imperial grooms are set substantially higher than those of princes and nobles. (Abū'l Faẓl [123], 144.)

[3] Habib [351], 54–5.

Table 12. *Monthly wages to 'peons' at Surat*

Year	Wages (Rs. per month)	Index
1616	2.40	100
1623	3.00	125
1690–3	4.00	166

Even if we concede only that wages lagged behind prices in the short run, we must assume that an extra gain occurred to the employers. This gain could become a significant source of capital only if wage-earners were, in relatively large numbers, employed by manufacturers. To the extent that the piece-wages, as well as the payments to domestic artisans, moved in line with daily and monthly wages rather than prices,[1] one can perhaps include merchants in the category of employers irrespective of whether they organized production in workshops (*kārkhānas*), which was rare, or 'put out' raw materials to artisans, which was common. The merchants might thus be said to have benefited from depression of the real wages in seventeenth-century India. The larger beneficiary, however, was clearly the ruling class, especially the nobility, and its hangers-on, who employed a very large number of servants and labourers.[2] But its gain would have had little significance for the accumulation of capital.

REVENUE

It could, moreover, be argued that the ruling class lost, by the same process of inflation, much more than it gained. Its income did not come from a sale of goods and so did not expand automatically with every rise in prices. The income of the ruling class came from collection of taxes, mainly the land revenue. If land revenue did not increase as rapidly as prices, the real income of the ruling class as a whole should have declined.

The best evidence by which we could check whether the total revenue collection kept pace with the prices would be statistics of such collection (*ḥāṣil*) for the whole empire or for localities for the whole period. But *ḥāṣil* statistics have come to us in a rather garbled form in some MS. tables only, and do not enable us to make a comparative table of tax realization in different years spread over the period.

What we get in much profusion, and well spaced over the period,

[1] Cf., however, Habib [351], 54. [2] Habib [351], 31, 34.

Table 13. *Estimated revenue against which* jāgīrs *were assigned in lieu of* manṣab-*pay*

Year	*Jama'* of north India	*Jama'* of *ṣūbas* of Agra and Delhi	Silver price of copper, nearest year	Years of copper prices
1595–6	100	100	100	1595
1605	110	122	100	1609
pre-1627	119	129	133	1626
1628–36	123	124	148 to 166	1628, 1633, 1634
1633–8	142	146	138 to 160	1634, 1636–8
1646–7	162	165	138	1638
c. 1656	168	254	179	1656
1667	145	193	235 and 242.4	1664
1687–1709	169	205	197.2–228.4	1687–90, 1693–7, 1706, 1709

are the *jama'* (*jama'dāmī*) statistics, i.e. the figures of estimated revenue against which *jāgīrs* were assigned in lieu of *manṣab*-pay. Taking the north Indian provinces of the Mughal empire, and accepting the *jama'* given for 1595–6 as the base (= 100), the above index (table 13) has been compiled. (The index of copper prices is given alongside for comparative purposes.)[1] If we take the copper price to have broadly represented the general price-index – for the former was probably just marginally higher during the seventeenth century, the *jama'* would seem to have lagged behind the increase in prices. Even if the prices had remained stable, the *jama'* ought to have increased (by about 15 per cent?) to allow for the absolute increase in GNP. It is true, on the other hand, that the index for the *jama'* of the *ṣūbas* of Agra and Delhi does not fall behind the index for copper, and the total *jama'* for northern India is actually pulled down by the very slow increase in the *ṣūbas* of Bengal, Multan and Thatta, and, rather surprisingly, Gujarat and Malwa.

Even if, on the whole, the *jama'dāmī* rose far more slowly than prices, this would not necessarily mean that the land revenue paid by the peasants did not exhibit a more flexible tendency. It would mean only that the imperial administration did not adjust the *jama'* fast enough to the rise in prices, and so allowed the *jāgīrdārs* to reap an additional gain

[1] The index for the *jama'* is taken from: Habib [343], 328. The copper-price index is based on the table of *dām*: rupee ratios set out earlier in this chapter.

from the difference between assessment and actual collection. One notices that in some of the *ṣūbas* (e.g. Gujarat and Thatta), where the *jama*ʻ did not rise substantially, the prevailing system was crop-sharing. Under this system, the tax was collected in kind; or, as was practically the rule, the amount of grain to be collected was commuted into cash at prevailing prices. In either case, the amount of tax collected would naturally rise in more or less exact correspondence with the prices.

The possibility of divergence existed only under the *ẕabṭ* system, where standard cash-rates per *bīgha* of land were fixed beforehand, for each crop from the headquarters. The evidence from eastern Rajasthan tends indeed to suggest that the rates did not keep pace with prices;[1] but in that region the crops on which cash rates were levied were few (no major foodgrain crop was covered), and the bulk of land revenue came from crop-sharing. In the *ṣūba* of Lahore, a comparison of the *dastūrs* in force in 1595–6 with cash rates reported from the same locality in 1697, shows that the rate on wheat had gone up 2.6 times, on barley 3.2 times and on gram 1.9 times.[2] Here the rise in prices appears to be fully reflected in the increase in the rates over the course of the century. It seems likely, therefore that where the *ẕabṭ* system covered the major crops, the cash rates were probably adjusted to the rising level of prices, in the long run.

In view of our present state of information, it would thus not be safe to assume that the rise in prices lightened the burden of the revenue payers or reduced the real income of the ruling class.

While the seventeenth-century inflation doubtless affected the Indian economy in important ways, its ability to subvert it was obviously limited owing to the existing structure of the economy. The ruling class was well entrenched; the agrarian system of exploitation was so structured as to adjust itself to secular price changes; and the share of benefits of any fall in the real wage gathered by the merchants was limited. A fall in interest rates might have helped commerce, but this was not in itself sufficient to generate capital.

[1] See the table of 'Average Price and Rate Indices', 1685–1750, given by Gupta and Moosvi [339a] (2), 190–1. Notice particularly that the great rise in prices during the second decade of the eighteenth century is not reflected in the cash rate indices at all.

[2] Habib [343], 194–5. The later rates are quoted for the *rabī*ʻ harvest of the forty-first regnal year of Aurangzeb: the *rabī*ʻ could either have been of 1697 or 1698.

CHAPTER XIII

FOREIGN TRADE

1 European trade with India

THE COMMERCIAL AND POLITICAL ORGANIZATION OF TRADE

The appearance of the Portuguese on the coast of Malabar in the closing years of the fifteenth century was one of those rare events in history, whose future implication was fully perceived by contemporaries. When Vasco da Gama's ships reached Calicut in 1497, it seems that the Portuguese already came well endowed with a profound belief in their mission. This is seen in the famous reply addressed to some Tunisian merchants present in Calicut that the Portuguese purpose in coming to the Indies was to seek for Christians and spices.[1] Two years later when Vasco da Gama returned to Lisbon with the news of his discoveries and exploits, King Manuel unambiguously declared himself, in a letter written to the Cardinal Protector in the Vatican, 'Lord over conquests, navigation and trade with Ethiopia, Arabia, Persia, and India'. The Portuguese claim to an armed domination of the maritime trade of the Indian Ocean found an even more striking expression in the instructions issued to Pedro Alvares Cabral, the commander of the fleet which sailed for India in 1500. Cabral was instructed to inform the King of Calicut of the ancient enmity which existed between Christians and Muslims, which imposed on every Catholic king the obligation to wage war on these enemies of the holy faith. The 'Moor' merchants who resided in and traded with Calicut could not clearly be exempted from that duty and the king must know that if the Portuguese encountered their ships at sea, they would take possession of them, 'of their merchandise and property and also of the Moors who are in the ships'.[2]

During the first two decades of the sixteenth century, there was a rapid transition from the stage when the Portuguese planned only individual attacks on Muslim shipping trading between the Red Sea and the western coast of India to one in which a carefully formulated policy was aimed systematically at a comprehensive control of the spice trade. The two essential conditions for the success of the Portuguese plan were

[1] Ravenstein, ed. [79], 48–9.

[2] Greenlee [82], 180.

a clear naval superiority over Asian ships and the establishment of a few key outposts on land which could act as strategic bases for the naval fleets and men left in charge of the trading operations. The Portuguese onslaught towards a realization of this goal began with the bombardment of Calicut in 1502 when it became clear that its king, the Zamorin, was not prepared to co-operate in expelling the Muslim traders from his port. Calicut's natural enemy and rival on the Malabar Coast, the Raja of Cochin proved more pliable and the first Portuguese fort on Indian soil was constructed in his territory during 1503. But it was not until the capture of the island of Goa from the Sultan of Bijapur in 1510 under the governorship of Alfonso de Albuquerque that the foundation of the future Portuguese maritime empire in the Indies was truly laid. A year before (1509) Francisco de Almeida had defeated and destroyed at Diu an armada sent by the Mamlūk ruler of Egypt, and the foundation of Goa as the chief administrative seat was rapidly followed by the capture of Malacca (1511), which controlled the sea-route to the Far East and which was an important commercial emporium in its own right. With the conquest of Ormuz in the Persian Gulf (1515), the Portuguese plan was virtually complete. To be sure, over the coming years a number of other fortified settlements and trading stations were added to the list. Such was the settlement of São Tomé de Meliapor on the coast of Coromandel, Hugli and Chittagong in Bengal, Macau on the estuary of the Pearl river in China, and Colombo in Ceylon.

This maritime empire later acquired the name of *Estado da India*. Its commercial policy and political ideology have been studied intensely, though not always from the same point of view. In so far as the foreign trade of the Indian sub-continent is concerned, the aspirations and the activities of the *Estado da India* represented several institutional innovations. In the general framework of Asian trade, a complete state monopoly of an important commercial product was not unknown, but it was a rare phenomenon. For Indian merchants and political rulers it was a relatively novel experience to encounter an imperial scheme that was being directed from a centre of power which was situated many thousands of miles overseas, in another continent. It must have been even more disturbing to discover that pepper and spices were the main commodities on which the Portuguese founded their imperial ambitions. For more than a century, since 1506 when Dom Manuel turned the spice trade of Lisbon into a crown monopoly, the Portuguese would seek to preserve their exclusive trade and empire in Asia through an undisguised exercise of sea-power. It is, of course, well known that their efforts to turn the flow of pepper and finer spices through the Red Sea and the Mediterranean were ineffectual in the long run, and after 1550 there was a revival of prosperity for the overland caravan trade bringing many

of the low-bulk high-value commodities of India and the further east to the Mediterranean ports of the Levant.[1] But this development did not come about as a result of any lack of political ideology on the part of the *Estado*. There is now a general consensus among historians that from the very beginning the Portuguese discovery of the Cape route to India was accompanied by a determination to place coercive methods before those of normal peaceful commerce.[2] However, it is necessary for the sake of historical accuracy to pick out the various contradictory elements in the evolution of Portuguese commercial aims in India.

Long-distance trade, in its Asian context, was an object of interest to indigenous rulers and governments primarily for the revenue they could derive from taxing the merchants. From the latter's point of view the levies and tolls paid to the political authorities were necessary items of expenditure, incurred in order to secure protection. In the commercial calculation of profitability, these payments would appear as a cost of a service which had to be paid for. Protection, at an inter-regional level, was not free, and the whole institutional practice may be described under the term 'redistributive enterprises'.[3] Indian rulers had for centuries exercised such controls over trade which passed through their territories, and in the overland trade between Europe and Asia the imposts levied by the various land-powers made a significant inroad into the purely commercial profits. Where the Portuguese introduced a relatively new concept was in their claim to control exclusively the sea-routes and the maritime trade of land-based states and empires of Asia. The absence or inferiority of naval forces belonging to Asian powers greatly aided the policies of the *Estado da India*, and in the process of establishing their naval supremacy the Portuguese became absorbed in the existing structure of the redistributive enterprises. But there were two different aspects to this sale of protection. On the one hand, a tribute was demanded from Asian traders and their ships, and on the other, the Portuguese allowed their direct trade with Europe to be influenced by the cost of obtaining protection on the overland caravan route. The first took the form of the *cartaze* system: every Indian ship sailing to a destination not reserved by the Portuguese for their own trade had to buy one of these passes from the Viceroy of Goa, if it was to avoid the seizure and confiscation of its merchandise. A later Portuguese legal authority, Seraphim de Freitas, justified the *cartaze* practice on the ground of the Papal mandate which granted to the Lusitanian crown quasi-political jurisdiction over the Asian waters. But the Indian states

[1] For a brilliant discussion of the revival of the pepper trade through the Mediterranean and the Portuguese policy, see: Braudel [240], I, 543–70.

[2] For a recent statement of this view, see: Steensgaard [519], 84.

[3] For a discussion of these theoretical points see: Lane [391]; Magalhães-Godinho [399]; Steensgaard [519], 81–95.

on the western coast which clearly had no reason to recognize the moral and religious authority of the See of Rome appeared to have acquiesced just as much to the issuing of the passes by the Portuguese. The sultans of Bijapur, for example, had the right since 1548 of sending a number of ships from Dabhol to Mokha under the *cartaze* system, and later the agreement was extended to include Mecca, Ormuz, and other places in the Red Sea and the Persian Gulf. Even the Mughal emperors licenced their ships sailing from Surat to Mokha.[1]

As a result of the Portuguese naval watch, at the end of the sixteenth century few Indian ships could venture to east Africa, the Spice Islands, or to China and Japan unless, of course, the shipowners entered into indirect partnerships with Portuguese officials or merchants in Goa. There is little doubt that the prosperity and wealth of Portuguese capital in the Indies came to depend a great deal on the revenue earned through the redistributive enterprise. But the view that the *Estado da India* was wholly a piratical and parasitic state, which grew rich by a ruthless plunder of unarmed Asian merchant ships, has not gone without challenge.[2] From the accounts of Linschoten and other independent European travellers of the sixteenth century, we know that golden Goa possessed a considerable inter-Asian trade of its own. As Diogo do Couto in his *Diálogo do Soldado Prático* remarked, 'in the old days when men reached India they asked "Which is the most dangerous outpost?"...whereas nowadays covetousness has got such a hold, that on their arrival they ask, "Who is preparing for a trading voyage to China, or Japan, or Bengal, or Pegu, or Sunda?".' Whatever may have been the theory, in actual practice the Portuguese attempt to control the seaborne trade of the Indian sub-continent was made partially ineffective through corruption and administrative laxity on the part of their officials in the Indies. In a sense, a similar development is visible also in their direct trade with Europe. The Portuguese failure to cut off the Mediterranean spice trade either at its source or in transit through the Red Sea turned them, as Fernand Braudel has pointed out, into customs officials.[3] During the second half of the sixteenth century, in organizing its pepper trade the Portuguese crown had the choice of eliminating its competitors by undercutting their prices in Europe or alternatively it could restrict its own supplies at the level where Portuguese prices matched those of the Levant traders, being determined by the latter's transport costs and payments for protection en route. One of the most original explanations of the survival of the caravan routes in this period is the recent suggestion that in following the last

[1] Moreland [424], 9; Alexandrowics [211].
[2] See: Boxer [238], 213. For an earlier and critical view, see: Van Leur [393a], 117–18.
[3] Braudel [240], I, 546.

alternative the Portuguese indirectly ensured that the pattern of redistributive trade should not undergo any fundamental change. The crown profits were fixed by protection costs on the caravan routes.[1]

In the seventeenth century the true heir to the Portuguese claims of a monopoly in the spice trade was the United East India Company of the Netherlands. There is no doubt that from the early years of its trade the Vereenigde Oost-Indische Compagnie (VOC) was determined to establish and defend with real strength an exclusive trade in finer spices and perhaps also in pepper.[2] But in the English East India Company it had an inconvenient and troublesome competitor whose own claims to a share of the spice trade introduced a complexity that had far-reaching effect on the structure and organization of European commerce in Asia. From the last decade of the sixteenth century both the Dutch and English merchants had begun to organize exploratory voyages to the Indies. With the relative decline in the naval and military strength of the Iberian powers and the increasing commercial confidence of the maritime nations of Atlantic Europe, it was natural that the merchant communities of Amsterdam and London would wish to participate directly in the highly profitable trade with Asia. The foundation of the English East India Company in 1600 and the merger of the various separate Dutch companies trading with the East Indies under one single organization, the VOC (1602), were the concrete expression of this desire. But the process through which the north European traders eventually established economic connections with the commercial centres of India was a slightly more complex affair. In the early years, the English and the Dutch had directed their ships towards the Indonesian archipelago and the Spice Islands, towards places where the Portuguese opposition was likely to be the weakest. The naval superiority of the Dutch fleets over slower and bulky Portuguese carracks soon enabled the VOC at least to abandon this policy of caution and to adopt a more hostile and aggressive attitude to its main European rival in the eastern seas. But if the existence of a well-established spice market in Europe and the Portuguese presence in Asia had been the chief motivating force behind the general policy of the two north European trading companies, they were to discover quickly that the commercial realities of trade in the Indian Ocean were inseparable from its Indian framework. For it was difficult to trade profitably in pepper and spices in the eastern archipelago without the aid of cotton textiles from India. The economy of many islands in the area was only imperfectly monetized at this time, and the clothing material supplied by the Indian handloom weavers provided

[1] For a discussion of this explanation of Portuguese policy and the redistributive trade and institutions see: Steensgaard [519], 101.

[2] Meilink-Roelofsz [412], 207–8.

an essential barter commodity which satisfied the needs of everyday wear as well as the demand of a luxury market. When Hendrik Brouwer, who was later to become the governor general of the Dutch settlements in the East Indies, declared in 1612 that the eastern coast of India, the Coromandel, was the left arm of the Moluccas, he was giving voice to a sentiment that was expressed many times by the Dutch policy-makers.[1]

Both the coast of Coromandel and the Gujarat plains in western India produced a wide variety of patterned cotton fabrics which found specialized markets in the islands of south-east Asia. While the prosperity of many artisan villages of these areas depended on overseas outlets, among which were those of Indonesia and the Spice Islands, the Indian exports were paid for by the latter's economic surplus. Indian consumption of pepper and spices made the Indonesian trade a lucrative one for merchants in both directions. The extension of Dutch and English trade to India in the first decade of the seventeenth century and their subsequent activities in the well-known trading cities such as Masulipatam and Surat owed a great deal to the exigencies of inter-Asian trade. But of greater importance, from the point of view of future development of Indian commerce, was the possibility that Indian textiles and other products of the sub-continent might find a market in Europe itself. Gradually a distinct and a new pattern of trade emerged. The Dutch largely replaced and took over the inter-Asian trade previously carried on by the Portuguese. The English Company also attempted strenuously to break into the 'country trade', though its measure of success in this branch was less than that of the VOC. But the promotion and development of the direct trade with Europe were undertaken by both the companies with a vigour that was conspicuously lacking in the days when the Portuguese were the sole European traders in Asia. There cannot be any question that the Dutch and English methods of trade in the Indian Ocean incorporated a much greater degree of mercantile and economic spirit than was the case with the Portuguese. At the same time, one can discern a strong undercurrent of political philosophy and acts whose principal aim was to strengthen and recreate the old monopolistic share of Asian trade for each of the European trading companies and to secure for themselves special fiscal privileges, thus reducing the burden of redistributive enterprises.

One of the earliest Dutch plans for a comprehensive organization of their Asian commercial network is a memorandum written at the direction of Admiral Cornelis Matelieff, who commanded the outgoing fleet in 1605. Apart from emphasizing the need to monopolize the trade in cloves, nutmeg, and mace, the writer of the document also

[1] Quoted by Terpstra [528], 40; *De Nederlanders in Voor-Indië* (Amsterdam, 1947), p. 40; Glamann [316], 132.

recommended that immediate relations should be established with the coast of Coromandel because of the cloth trade. Gujarat was obviously another region which merited attention but at a later date.[1] But already in 1605 one of the Dutch factors, Van Soldt, had visited the port of Masulipatam. During his second visit in the following year, Soldt succeeded in obtaining a *farmān* from the King of Golconda which not only allowed the Dutch to establish a factory in Masulipatam but also granted to them a much lower rate of duty.[2] It is not surprising that the VOC's early factories in south India should have been located in the delta between the Krishna and the Godavari rivers. For this was a region famous for the weaving and painting of fine chintz, exported in such large quantities to Bantam, Achin, Malacca, and even as far afield as Manila. However, increased familiarity with the economic conditions of Carnatic brought with it an awareness that much cloth was produced further south and that the finer chintz could be purchased much more cheaply in the areas under the milder rule of Vijayanagar than that of Golconda. The cloth produced around Pulicut was again particularly in demand in the Spice Islands. It was these considerations which caused the Dutch factors to seek commercial concessions first at Tegenapatam (1608–9) in the territory of the *nāyak* of Gingi and later in Pulicut itself (1610), which eventually became the main centre of Dutch trade in Coromandel until the headquarters were shifted to Negapatam in 1690.

In the north, the establishment of a proper trading factory at Surat took the Dutch much longer to achieve. It was not only that the Gujarat cloth was of lesser importance in the Dutch trade with south-east Asia; but the Portuguese political influence in the imperial court of the Mughals was also such as to make it hazardous for the Protestant trading companies to enter into regular and extensive commercial transactions at the Mughal port without proper diplomatic safeguards. With the death of van Deynsen in Surat in 1607, the first Dutch attempt to reach the western coast of India came to an abortive end. However, in 1614 when the Mughal authorities in Surat found themselves engaged in a naval war with the Portuguese, an invitation to come and claim the goods left by van Deynsen was issued to the Dutch factory at Masulipatam. Although an agent was sent to Surat in the following year, it was only with the appointment of Pieter van den Broecke as the official envoy of the Batavia government that a permanent factory was opened in Gujarat (1617). By this time the Dutch policy against the Portuguese commercial empire in the Indies had crystallized into a definite plan. This was nothing less than the capture and destruction of the major strongholds controlling the trade routes. The plan took a long time

[1] Commelin [99]. See also Moreland [424], 20.
[2] Raychaudhuri [465], 16.

to execute, but its goals were pursued with unremitting vigour and determination.

The Dutch attempt to dislodge the Portuguese from a position of power began with individual attacks on their shipping, and was quickly extended to their possessions on land. Within a few years of its foundation, the United Company felt strong enough to undertake the blockade of Goa and Malacca from the sea. In the Spice Islands, Amboina was captured in 1605, and though the Portuguese aided by Spanish fleets from the Philippines were able in these early years to mount various counter-attacks against the Dutch, their naval strength was reduced by successive Dutch victories.[1] But even so, as late as 1633 one of the officials of the Dutch Company, Philip Lucasz, considered the Portuguese cloth sales in Malacca as damaging to the trade of the Company. For the Coromandel and Surat textiles brought in by the Portuguese were still widely sold and distributed in the Indonesian archipelago.[2] In order to strike a decisive blow against this trade, it was necessary to conquer Malacca, besiege Goa, and to patrol the Coromandel Coast. The second element in Dutch policy was the capture of the cinnamon trade of Ceylon and the elimination of the Portuguese pepper factories in Malabar. From 1636 for ten successive years Goa was blockaded every trading season. Malacca fell in 1641, after a determined resistence, and the policy of conquest reached its final fruition with the conquest of Colombo (1655–6) and Cochin (1659–63). Henry Gary, an Englishman, who was in Goa when the Dutch squadron appeared in January 1663 to blockade the port records the effect of the news on the Portuguese: 'This late losse of Cochine and the calamities which so much threatneth to fall uppon them suddenly...hath brought so much confusion and distraction uppon these people as that the principalest fidalgos and the whole Councill of this State hath severall times made them of late presse the Viceroy to make an offerr of Bombaim unto Sir Abraham Shipman.'[3] The letters written by the English factors in Malabar, following the fall of Cochin, indicate that the Dutch policy on the coast would run on the line of the classic coercive method adopted in Indonesia, whereby a subjugated local ruler bound himself by a formal treaty not to 'suffer any buyers or sellers in any part of his country' except the agents of the VOC.[4]

While the Dutch were consolidating their commercial organization in the Indies with territorial bases and factories in Java, the Moluccas, and the Indian sub-continent, the English East India Company had been

[1] Boxer [238], 226–7.
[2] Meilink-Roelofsz [413], 189.
[3] Henry Gary to Lord Marlborough in England, 16 February 1663, Public Record Office, C.O. 77, Vol. 9, No. 3; Foster [31] (1661–4), 218.
[4] Porakad to Surat, 17 April 1663, in Factory Records Surat, Vol. 103, p. 276; Porakad to Surat, 7 June 1664, *Ibid.*, Vol. 104, p. 105.

equally active, although financially it was a much smaller concern. In many important respects, its commercial strategy during the first half of the seventeenth century differed significantly from that of the Dutch. It is true that in common with the latter, the early voyages of the English Company concentrated on the pepper ports of Indonesia as well as ports in the Spice Islands. But two major problems were soon encountered in relation with the pepper and spice trade. In the first place, it was discovered that the Dutch, who possessed far greater naval and military strength, were not prepared to admit trade rivals. Secondly, the home market based on England alone was too small to permit profitable operations. The military dangers from the Portuguese and the Dutch made it necessary to equip and dispatch to the Indies a fairly large fleet of ships. On the other hand, the total quantity of pepper and spices consumed in England could have been comfortably carried in any one of these ships alone. Some consequences of this situation can be seen in the tremendous glut of pepper in England in 1603 when the returning East India fleet brought back from the Indies practically nothing but pepper. Thus under the twin necessity of a restricted home market and the problem of 'economies of scale', the English Company was forced to extend trading relations to the ports of India, both in order to diversify its exports from Asia and in order to optimize its profits by securing a secondary line of trade goods for sale in the eastern islands. This sequence of events led to the rise of an active re-export trade in Europe and the establishment of trading posts in Gujarat, the Coromandel Coast, and eventually in Bengal.

The earliest plan for approaching Surat and the Red Sea in order to explore the trading prospects was drawn up in London in 1607 when the Third Voyage was being prepared under the command of Captain Keeling and William Hawkins. Although the latter succeeded in reaching Surat two years later and spent several years in the court of Emperor Jahāngīr, the early English efforts to gain a foothold at the Mughal port were not very successful. It was not until the arrival of Thomas Best, the commander of the Tenth Voyage, in 1612 with three ships that the Company's factors at last managed to obtain an imperial edict granting formal trading rights which, if it did not guarantee security from the Portuguese at sea, at least offered the political safeguards from the Mughal authorities, so long desired by the English. The senior factors sent out in this voyage proved enthusiastic supporters of the trading possibilities at Surat and elsewhere in India, and in their letters to the court during the next three years put forward a complete outline of the trading methods to be pursued in India. The first and main concern of the agents was naturally with the danger from the Portuguese. To combat their naval and political opposition, it was

proposed that the Company should increase its own armed shipping and seek diplomatic representation at the imperial court to counter the influence of Jesuit priests. Once the English were secure from Portuguese attack, trade at Surat could be organized both to supply the Company at home with Indian commodities by sending back one or two ships directly to England and also to strengthen the trade of the Bantam factory in Java by using the rest of the shipping to furnish goods suitable for the eastern markets where, according to the English factors, they yielded a gross profit of 300 per cent.[1] While the foundation of a permanent factory at Surat in 1613 was aided by the considerations of direct European trade, it was no doubt the prospect of organizing the 'country trade' on a sound basis that had led the Company earlier in 1610 to accept the offer of two Dutchmen, Peter Floris and Lucas Antheunis, to set out a voyage to the coast of Coromandel. The venture was commercially successful and the English factory at Masulipatam (1611) became one of the most important in India even after the rise of Madras.

At the end of the first ten years of its existence, the English East India Company was fairly well informed of the essential facts in regard to the structure of commerce in the Indian Ocean and India's place in the interlocking network. This knowledge impelled the court of committees, the chief governing body of the Company, to embark on a policy of expansion. It found expression not only in the rapid extension of factories in the inland areas of trade but also in the appointment of Sir Thomas Roe (1615) as the official ambassador of James I to the Mughal court. In addition, plans were made to extend the Company's trade with Persia. However, commercial life in the Persian Gulf and the Red Sea still had strong political overtones, and the Portuguese menace was not finally removed till the stronghold of Ormuz, once considered impregnable, was captured in 1622 by a joint Anglo-Persian force. In 1633, Mughal forces in Bengal of their own accord expelled the Portuguese from Hugli, which had become the chief trading town of the eastern province. The way was now left open for the English and the Dutch Companies to establish their trade in an area of India that was even now known as the sub-continent's food granary and which was later to become the chief textile-producing area in the Mughal empire.

The commercial organization of the north European trading companies in India rested on a common structural form throughout the seventeenth and eighteenth centuries. Its main feature was a head settlement or factory situated at or near some major Indian port with subordinate stations in the interior where many of the export goods

[1] Danvers [30], 239.

were produced. The head settlements were normally independent of one another's authority, though close operational ties were maintained between them. The principal factories of the VOC were at Surat, Cochin, Pulicut, Negapatam, Masulipatam, and Hugli. For the Dutch Company, once this essential structure based on India's most important maritime provinces had taken shape, it did not change fundamentally until the dominant political position of the English East India Company undermined Dutch position in India in the second half of the eighteenth century. But the story was very different for the English. The possession of Batavia and a strong territorial base in Java enabled the VOC to avoid the necessity of seeking similar bases in the Indian sub-continent, with the exception of the Malabar Coast where the Dutch intended to create a monopoly in pepper. The English Company, on the other hand, felt vulnerable without fortified settlements, partly because it wished to avoid payments to the local redistributive enterprises and partly because the Company wanted to become a redistributive enterprise in its own right.[1] The acquisition of Madras from a local ruler in 1639, the transfer of Bombay from the English crown to the Company in 1665, and the fortification of Calcutta (1696–9), were all part of a general plan to make the Company's trade independent of the political power of the indigenous rulers. English imperial policy in our period reached its ideological peak under the governorship of Sir Josiah Child, when the Company decided to go to war with the Mughal empire (1687–9). In 1686, for example, in a letter drafted by Child, the Madras Council was informed,

> You see what a mighty charge we are at to advance the English Interest and make this Company a formidable Martial government in India which formerly the Dutch despised as a parcel of mere trading merchants or Pedlars as they used to miscall us...without [revenue] it is impossible to make the English nation's station sure and firm in India, upon a sound Political Basis and without which we shall always continue in the state of mere merchants subject to be turned out at the pleasure of the Dutch and [at] the discretion of the Natives.[2]

The war with the Mughals was, in the end, lost. But the extent to which the Company still wanted to share in the redistributive profits is seen in another letter written in 1711, in which the Madras government was urged to do its utmost to encourage the trade of the port and the economic activities of its inhabitants and emulate the example of Batavia which by trade had become a formidable as well as a noble settlement.[3]

[1] Both the English and Dutch took over from the Portuguese the practice of demanding pass-money from Indian merchants in return for guaranteeing protection from their own ships. Thus in the seventeenth century indigenous shipping in the Indian Ocean would be equipped with passes from several European nations.

[2] Records of Fort St. George [35] (paras. 10, 27), 10, 13.

[3] Court of Directors to Madras, 3 January 1711, Despatch Book, Vol. 97, para. 12, p. 117.

During the eighteenth century, India's foreign trade underwent a considerable expansion as a result of the tripartite participation of the Dutch, English, and the French. From a modest and weak position, the latter rapidly emerged as a formidable competitor, and by the third decade of the century French trade with India was treated with respect even by the English Company which had by this time supplanted the Dutch in the volume of its commerce. The first organized attempt made by the French to enter the Indian trade dates from 1664 when Colbert formed the *Compagnie des Indes Orientales*. A factory was founded in Surat soon after, and the organization of French commerce in the Indies entrusted to François Caron, an ex-official of the VOC.[1] In these early years, the main problems encountered by the French in India were the difficulty in securing proper trade concessions and privileges from the native rulers, and the antagonism of the fellow-Europeans already well established in the sub-continent. In 1666, La Boullaye le Gouz, who was sent out from France as an ambassador to the Mughal emperor, wrote to Colbert advising him to to spare powder and bullets to put down the arrogance of the Dutch.[2] Four years later, the French minister decided to show the flag in the Indies and a fleet composed of nine men-of-war was dispatched to Asia under the command of de la Haye. His instructions were to establish positions of strength, by force if necessary. The arrival of a powerful French fleet in Surat (1671) naturally caused a stir. But its ultimate results were disappointing, not the least because constant dissension among Frenchmen themselves held up commercial progress. As Abbé Carré, the French priest who has left an account of these events, remarked, the English and Dutch 'were enchanted at seeing that these brawls and pinpricks between our chiefs were only ruining our business among the nations of the East, whose merchants are quiet, peaceable, and sworn enemies of discord, and are easily discouraged at the least sign of trouble due to such quarrels'.[3] In 1672, de la Haye, sailing down to the Coromandel Coast had captured St Thomé, which had passed into the possession of the King of Golconda from Portuguese hands. He was in turn besieged by a combined force of Golconda and the Dutch Company, and forced to capitulate in 1674. Although by this time the fortunes of the impressive fleet which had sailed from France four years earlier had sunk to a low level, one of the agents of the French Company, Bellanger de Lespinay, succeeded in obtaining the grant of a small village in the territory of the neighbouring Kingdom of Bijapur (1673). This village, Pondichery, later became the capital and centre of French activities in the Indies.

[1] Caron had served with the Dutch Company for twenty-six years and was a French Protestant from Brussels.

[2] Sen [489], 45.

[3] Carré [105], I, 144.

The achievements of the first Compagnie des Indes which traded for just over half a century were by no means inconsiderable. Between 1665 and 1676, for example, the Company equipped and dispatched to India thirty-five ships; between 1679 and 1695 thirty-nine ships, and 1697 to 1706 ten ships.[1] These figures are much smaller than comparable Dutch and English shipping lists. But with the foundation of the second French East India Company by Jean Law (1719), French operations became far larger in India.

If the possession of fortified trading settlements, well secured by the power of the 'great guns', was one of the accepted methods of European trade in Asia, another equally strong tradition was the use of the naval blockade. In important trading areas, such as Surat or Hugli, where the Europeans lived and traded under the jurisdiction of Mughal officers, the threat of a maritime blockade preventing the indigenous ships from leaving the ports was the European answer to their vulnerability on land. In fact, one can point at an exceptionally well documented and recurrent pattern of political behaviour on both sides. When a dispute broke out between one of the trading companies and the Mughal authorities – and there were many in our period – which could not be resolved by the mediation of Indian merchants, the first step taken by the latter was to cut off the supplies of food and other daily necessities to the European factories. The beleaguered councils replied by calling in their warships which either blocked up the port or made prizes of Indian merchant vessels. It was in the interest of either parties not to push matters to an extreme position, and the policy of brinkmanship eventually ended in a compromise without too much violence. The disputes mostly occurred over the payments of customs dues or some other forms of financial impositions, which the European trading companies considered arbitrary and unwarranted. The Mughal officers, on their part, frequently complained that the servants of the companies were evading the just payment of duties on their own private trade or allowing the Indian merchants to transport goods in ships flying European colours. The last point particularly concerned the trade passing through English settlements. For in order to avoid the running controversy over customs, the English East India Company had obtained an imperial *farmān* from the court in Delhi (1717), which, among other concessions, made the Company's trade customs-free throughout the imperial territories in return for an annual tribute of Rs. 3,000. The edict of Emperor Farrukhsiyar was to become the cornerstone of English commercial and political policy in India, and by making the Company partly independent of the local redistributive enterprises, it opened the way to possible corruption and abuse of the

[1] Kaeppelin [374], 645.

system.[1] The indigenous merchants, subject to the payment of numerous tolls and customs dues, were placed in a position of disadvantage and strove to overcome it by purchasing duty-free trading passes from the English Company.

By the early 1740s the weakness of the central government in the Mughal empire combined with the growth of provincial autonomy and the military powers of the Maratha Confederacy, had made the European trading companies in India fully aware of the political opportunities which lay open to further their own economic interests. It was this awareness that was to lead to Anglo-French confrontations on the coast of Coromandel, with each side supporting the succession claims of rival warring dynasties, and eventually to the revolution of Plassey itself (1757) which established English territorial power in Bengal. It must be pointed out that the court of directors did not always approve of the policy pursued by their servants in India. Political or imperial adventurers in the sub-continent were frowned upon by the Company at home for the same reason that the opening of new and unnecessary trading stations were disliked in the earlier period. They tended to increase the overhead costs of trade without perhaps bringing immediate financial returns. An organization as conscious of general commercial goals and business ethos as the East India Company, could scarcely overlook, in spite of its long tradition of political manipulation, an aspect of trade that did not take into account short-term maximization of profits. In 1758, in the aftermath of Plassey, when the Calcutta Council suggested to the court that the factory at Kasimbazar should be fortified so as to keep the Nawab's neighbouring capital of Murshidabad in awe, the Company reminded the Bengal servants that the latter's grand military plans and ideas had made them forget that the employers they served were merchants whose principal object was trade.[2]

THE COMMODITY STRUCTURE OF TRADE

It is inconceivable that European trade with India – or with Asia in general for that matter – could have been sustained on a large scale for any length of time without the discovery of American silver-mines. The connection between the rise of intercontinental trade, on a multilateral pattern, in the sixteenth and seventeenth centuries and the sudden increase in European monetary liquidity was not fortuitous. The expansion in money supply enabled the trading nations of the west to

[1] The *farmān* of Farrukhsiyar did not entirely free the Company from arbitrary impositions, as substantial bribes had to be paid regularly to the servants of the Bengal Nawab to persuade them to accept its legality.

[2] Calcutta Council to Court, 10 January 1758, printed in *Fort William-India House Correspondence 1757–1759*, ed. H. Sinha (Delhi, 1957), para. 113, p. 282.

finance a heavily adverse balance of trade with Asia for nearly three centuries, and in the process it brought into productive use factors of production that had probably remained unutilized previously. But the nature of Indo-European trade, the marked imbalance between commodity exports and imports, caused the contemporary economic observers and theorists considerable disquiet. Under the influence of mercantilist thinking these writers devoted a great deal of their attention to an examination of the problem of instability in national finance resulting from an adverse balance of trade. Since the same metallic units were used both for domestic currency purposes and international trading, there was very little that could be done in insulating a country either from the effects of its own trade deficit or changes in the international monetary system. Fluctuations in bimetallic ratios were obviously one of the major sources of such disturbance, and in the contemporary mind there was a close link between the phenomenon of a scarcity of coins and economic depression. The European East India Companies with their large annual shipments of treasure to the East introduced a potential source of instability in world monetary system and were thus specially singled out for adverse criticism. However, not all mercantilist writers of the period were convinced bullionists. That the volume and character of international trade had some relationship with money, prices, and wages was understood by many early-eighteenth-century economists. In a treatise published in 1729, for example, Thomas Prior comments that as gold and silver were more scarce in the East Indies than in Europe, it could be expected that wages and prices of commodities there would be lower than at home. This was the reason why 'we export very few manufactures to that part of the world; but to purchase their commodities are obliged to send specie thither'.[1] In the correct tradition of the early quantity theorists, Prior perceived that the flow of precious metals from Europe to Asia in this period was caused by a disparity in the bimetallic ratio in the two continents, and he suggested that in time this might be equalized by the export of bullion from Europe which would cause the prices of Asian commodities to rise in the same proportion.

The idea that trade between India and Europe was a function, among other things, of price differentials, was stated in even more succinct terms by the author of an anonymous tract published in 1701, as we can see from the following quotation.

The cheapest things are ever bought in *India*; as much labour or manufacture may be had there for two pence, as in *England* for a shilling. The carriage thence is dear, the customs are high, the merchant has great gains, and so has the retailer; yet still with all this charge, the *Indian* are a great deal cheaper than

[1] MacCulloch [119].

equal *English manufactures*. Every man will buy the best penny-worth; if this is to be had from *India*, the bullion will be carried thither. There is no reason to believe, that the *Indians* will take off any of our manufactures, as long as there is such a difference in the price of *English* and *Indian* labour.[1]

The author's analysis was very close to the theory of comparative advantage as it was later developed by David Ricardo, since he ascribed the difference in international prices to labour costs and treated a higher productivity of labour as the same thing as lower 'real' wages. We do not have sufficient evidence to determine whether it was purely monetary factors or the difference in production functions that accounted for the disparity in the price structure between Asia and Europe. For price differentials in individual items of exports, particularly textiles, the technology of the production processes was obviously important. The tract mentioned above, for example, pointed out that the freight costs of raw cotton were almost the same as those for finished cloth, and yet the latter could not be manufactured in England as cheaply, as English labour was a great deal dearer than Indian. It is perhaps not entirely by chance that the large-scale application of machinery to production occurred in the textile industry in Europe, in which case the Indian imports probably served to map the demand conditions for English entrepreneurs.

Although it is clear that the commodity structure of Indo-European trade – precious metals being exchanged for manufactures and primary goods – was determined by economic factors and not by consumer resistence to European imports, it is still uncertain what effects the import of treasure had on the Indian economy. The traditional answer has been that the effects of bullion influx were neutralized by hoarding and the oriental taste for ornaments.[2] But this is entirely speculative. No evidence has ever been produced on Indian price-movements, the volume of annual imports of gold or silver, and the Indian requirements of precious metals for currency purposes in relation to the size of her population and economic transactions. Hoarding was certainly a widespread feature of Indian economic life, as it was in Europe, and there is evidence that the price of bullion fluctuated a great deal in India according to trading conditions and did not universally command a premium at all times. There were also considerable bimetallic movements of treasure to and from India. Silver imported from Europe or the Philippines via the galleon trade from Acapulco, often flowed out again to China where the bimetallic ratio was lower than in India. When Gemelli Careri, the Italian traveller who visited India in 1695, stated that all the gold and silver which circulated in the world eventually found its resting place in the Mughal empire, he was unquestionably

[1] MacCulloch [117], 549.

[2] Blitz [233], 39–55.

exaggerating.[1] India was only the penultimate destination of the American silver. Long before Careri wrote his accounts, a prominent member of the English East India Company had pointed to the outflow of American silver from Europe to the Indies (1621). He distinguished three streams by which the greatest part of 'the fountain of silver springing in the West Indies' and coming to Spain was again dispersed all over Asia.[2] One was by way of Aleppo for raw silk; another by way of Mokha in the Red Sea for calicoes. While the third was round the Cape of Good Hope to Surat and the East Indian islands for indigo, pepper, cloves, mace, and nutmeg. He valued the total volume of the bullion annually exported to Asia at £1.5 million.

There is no way of verifying the accuracy of this estimate. It was certainly a high figure. At the end of the sixteenth century the Portuguese export of silver for pepper purchases lay between 150 to 200,000 cruzados a year.[3] In the early seventeenth century the annual bullion shipments of the English East India Company seldom exceeded £60,000, though in one particular year, 1629, as much as £200,000 was exported in foreign coins and bullion.[4] Dutch export figures are not available until 1652–3, when the total supply of silver and gold received in Batavia came to 553,731 florins; of this, 134,943 was in Japanese silver.[5] By the first half of the eighteenth century the Dutch export of money to the East had increased to 3.7 million florins a year, while the English exports varied between £500 and £800,000. A considerable proportion of the total money sent to Asia was, of course, invested in India. But the Dutch Company had a secondary and a profitable source of purchasing power in its export of finer spices to the Indian markets. The English Company was denied this particular advantage, as it was successfully excluded from the trade of the Spice Islands, and its only supplementary source of finance lay in the sale of English broadcloth, unwrought metals such as lead, tin, and iron, and various European luxury goods.

Enough has already been said to indicate that the main problem which European trade with India had to overcome lay in the provision of purchasing power for the return cargo. The bulk of profits on this trade came not from the sale of European exports to India but from Asian imports sold in the markets of Europe, Africa, the New World, and even the Middle East. The so-called triangular trading connections between Europe, the west coast of Africa, and the settlements in America and the West Indies based on slave plantations, provided an important

[1] Careri [109], Book II, chapter 6, 248.

[2] This was a memorandum written by Sir John Wolstenholme for a commission appointed by government to examine the problem of a drain of silver from England. See Public Record Office, East Indies, Vol. I, No. 88.

[3] Magalhães-Godinho [399], 688, 693.

[4] For English exports see Chaudhuri [266], 115.

[5] Glamann [315], 59.

background to the development of East India trade. But in the sixteenth century Portuguese commercial presence in the Indian sub-continent was firmly based on a single staple, the export of black pepper from Malabar and Kanara. For the purpose of procuring pepper, factories had been established in Cochin, Cannanore, and Quilon, and according to one estimate around 1515 more than 30 per cent of the Malabar production was shipped to Lisbon by the Portuguese. However, by the end of the century such shipments comprised only 3 to 4 per cent of the total.[1] That pepper was very big business is shown not only by a Venetian estimate dating from 1584 which put the total net revenue realized by the Portuguese crown on its import at 557,000 cruzados, but also by the interest later displayed by the English and Dutch Companies.[2] In the eyes of an English pamphleteer, John Wheeler, the merchants of Antwerp made huge and unjustified monopoly profits from the sale of Portuguese pepper in Europe.[3] It is difficult to make accurate estimates of the total European pepper imports, although the quantities brought back by the English and Dutch ships in the seventeenth century are well recorded. The members of the English Company, owing to their method of retailing it, made no special effort to gauge the European consumption on the Company's account, although individually they took careful note of the market trends.[4] In 1621, however, Thomas Mun calculated that 6 million lb. of pepper were annually imported into Europe.[5] A year later the directors of the VOC put the figure at 7 million lb. of which, it was estimated, the Portuguese imported about 1.4 million, while the remaining 5.6 million was shared by the English and Dutch.[6]

It is possible that these figures erred on the side of over-estimates.[7] In the 1670s when the European import of pepper was probably at its peak, the Dutch annual orders varied between 7 to 9 million lb., while the English Company had a standing order for 2.5 million. But the actual English imports were much greater. In 1670 the Company received 4.3 million lb. of pepper and two years later the quantities went up to as much as 7.6 million. The record for the Dutch Company in the seventeenth century was reached in 1670 when the ships brought back 9.2 million lb.[8] There was a special reason why the imports should have been inflated at this time. In the early part of the century, the

[1] Kieniewicz [382], 61–84.
[2] Steensgaard [519], 97.
[3] Wheeler [115], 36.
[4] For the English Company the distribution and retailing of pepper were always left to the wholesale dealers.
[5] Mun [116] printed in MacCulloch [117], 11.
[6] Glamann [316], 74.
[7] Chaudhuri [266], table V, 148; Steensgaard [519], 156.
[8] English figures are compiled from India Office Records, General Ledgers; for Dutch figures see: Glamann [316], 83.

preponderance of pepper in the return cargo of European shipping was due to a number of factors. Its purchase in the Asian markets required no complicated organization or experience. In Europe, it already had an established market and a ready network of distribution. The fact that it was an article of mass consumption meant that it could be retailed in small quantities and was within the reach of varied income-groups. Finally, pepper was a necessary import to the trading companies for a purely technical reason. Without its use as ballast cargo, it was difficult to stabilize the ships during their arduous homeward voyage, and to fill them with high-value goods alone was too hazardous because of the risk of shipwreck. But in the 1670s when the Dutch began to pursue a policy of conquest on the Malabar Coast, the English Company went in perpetual fear that it would be driven out of the pepper trade as effectively as it was from that of the finer spices. A trade war with the intention of making pepper a loss-making commodity was followed by both sides, which eventually caused the total imports to decline. But even in 1687 the English Company was writing to Bombay:

If the present misunderstandings between the two Nations should ferment to an open war, it would be thought by the Vulgar but a war for Pepper which they think to be a slight thing, because each family spends but a little of it. But at the Bottom it will prove a warr for the Dominion of the British as well as the Indian Seas. Because if ever they come to be sole Masters of that Commodity, as they are already of nutmegs, mace, cloves, and cinamon, the sole Profit of that one Commodity, Pepper being of generall use, will be more to them than all the rest and in probability sufficient to defray ye constant charge of a great Navy in Europe.[1]

In the end, the decline of pepper from the position of the premier Asian import to Europe was due not so much to the political efforts of the Dutch, as the competition from other goods, of which Indian textiles were the most important. From trading Coromandel and Gujarat piece-goods to the Indonesian archipelago, the European Companies found it an easy step to extend their import into Europe itself. It seems that at the beginning the English had a clear lead over the Dutch and it was only in the second half of the seventeenth century that the latter stepped-up their European cotton-trade.[2] Indian textiles were brought back to London in small samples during the period of separate voyages. But it was not until 1613 that calico appears as a regular item in the Company's auction sales, and even then the total quantities imported remained modest for at least the next two years. The Company was clearly testing the demand cautiously before instructing the factors to

[1] Court of Directors to Bombay, 3 August 1687, Despatch Book, Vol. 91, p. 321.

[2] For evidence of this statement see, Court of Directors to Madras, 16 February 1670, Despatch Book, Vol. 87, p. 333.

increase the supplies for England. In 1609 William Finch had sent a list of the types of cotton cloth available in western India suitable for the European or the Levantine markets, advising that the fine white fabrics and the painted calicoes of Gujarat would yield most profit. The former could be exported to the north African markets or the Levant where the Moors made their 'cabayas' from this cloth, while the latter might prove useful at home for making fine quilts and also serve as wall hangings.[1] By 1614 the English Company had resolved to order more than 12,000 pieces of textiles from Surat, and in the auction sales of 1619 over 26,000 pieces were sold.[2] In 1621 the exports from India had increased to 123,000 pieces and by 1625 reached 221,500 pieces.[3] The Dutch Company in contrast only asked for 7,000 pieces in 1617. The success of Indian cotton fabrics in Europe during these early years was undoubtedly due to their relative cheapness as compared with non-woollen cloth produced at home. For when the terrible Gujarat famine of 1632–3 forced up prices in India, the Company wrote to the factors 'calico here stand upon these terms, that if it may not be afforded to undersell the Germany, Scotch, and French linens, then they will not sell to any considerable quantity; and then one of the main pillars of the Surat trade is overthrown'.[4]

By the third quarter of the century the popularity of Indian textiles had become sufficiently established as to extend their use to the luxury end of the market. However much the contemporary moralists and economic experts condemn the use of Indian cotton and silk as vainglorious and harmful to the nation's interest, the public, both rich and poor, were unmistakably aware of the advantage of cotton as body linen and clothing material. The actual import figures provide an eloquent testimony of this approval. In 1664 the total quantities imported by the English Company stood well over 750,000 pieces and their value accounted for 73 per cent of the entire trade of the Company. In two decades the first figure had jumped to more than 1.5 million pieces and the relative share of textiles in total value had increased to 83 per cent. The number of Indian cotton-goods sold in Amsterdam by the Dutch Company during the quinquennium 1684–9 came to 1.12 million pieces. As it happens, the 1680s was the great period of expansion for Indian cotton and to some extent the imports of these years were exceptional. But public observers who watched the soaring upward path of the textile imports in the previous twenty years might have easily concluded that the trend would continue. The fact that the

[1] *Letters Received*, I, August 1609, 28.
[2] Ibid., II, 14 November 1614, 125; Court Book, IV, 313–14; Chaudhuri [266], 193.
[3] Chaudhuri [266], 193.
[4] Factory Records Miscellaneous, XII, 29 November 1641, 39.

rate of expansion in the eighteenth century failed to maintain its momentum may be attributed to the saturation of the market and partly to the imposition of heavy protectionist duties in many European countries, which culminated in some cases in a total prohibition of certain categories of textiles. From a quantitative analysis of the very full statistical information available in the English and Dutch sources, one can draw certain broad conclusions about the composition of the European trade in Indian textiles. In the first place, the numerous different types imported can be classified under five generic groups: (1) plain white cotton, (2) plain dyed cotton, (3) striped and check cotton, (4) chintz and embroidered cloth, and (5) silk piece-goods, including, in the latter, fabrics containing a mixture of cotton and silk yarn. The chintz formed an important category and attracted considerable attention from a manufacturing point of view because of the highly specialized Indian technique of dye-fixing. Pure-silk textiles were rarely exported from India, and most of the goods under this category were of the mixed variety. The most important Indian silks handled by the trading companies were the Bengal taffetas, which before 1700 occupied a major position in the textile exports from the region. Within each of the five categories mentioned above, it is possible to make further distinctions. Regarding the plain cotton, European buyers invariably distinguished between a calico and a muslin. The former was a relatively coarse and thick cloth, while the latter was the superfine product of Bengal. A frequency count of the textiles in several price-ranges proves conclusively that western India specialized in supplying low-cost textiles, many of which were used in the African slave-trade, while those from Madras and Bengal fall into the middle and the top range. When seen against the relative shift in the seventeenth century of European trade in India from Surat to Coromandel and from the latter to Bengal, the price structure of the cotton goods strongly suggests that the character of the textile market at the European end underwent some fundamental changes. The main demand in the earlier period must have come from the lower-income end of the market; but by the beginning of the eighteenth century the Bengal muslins and the Coromandel chintz were in wide demand for aristocratic fashionwear.

Of the other commodities imported from India indigo was at first highly prized as a profitable article. It was later supplanted by saltpetre and Bengal raw silk. As a dyestuff indigo had many advantages over woad, which was traditionally used in Europe for making blue colouring. It was relatively fast, and cheap to use. An eighteenth-century French dye expert estimated that one vat of indigo dyed as much material as two vats of woad.[1] India, of course, was not the only country

[1] Hellot [365], 37–8.

which produced indigo, though the varieties grown near Ahmedabad and Agra were considered some of the best. The main problem faced by the trading companies in their indigo trade was that from the middle of the seventeenth century the Indian imports began to encounter strong competition from the products of the West Indies and Spanish America. As early as 1645 the English Company was expressing apprehension about the effects of Guatemalan imports on its own indigo trade, and in 1670 the Surat factory was warned that buyers in London were complaining about the quality of the Indian variety and that if a remedy was not found the price would depreciate and discourage the Company from importing indigo from India.[1] By the turn of the century this fear was realized and the unprofitability of Indian indigo in European markets caused the Company to discontinue it until the West Indian supplies were seriously disrupted towards the end of the eighteenth century. Although indigo was always listed with 'gruff' goods in the official correspondence, there was some doubt whether it could properly be described as a bulk commodity. But for saltpetre there was no question at all: it was a non-perishable chemical, impervious to rough handling, and as such admirably suited for ballasting the East Indiamen. The export of saltpetre from India in the seventeenth and eighteenth centuries was a new development in the history of her maritime trade. According to Moreland, the historian of the Mughal economy, there are few references before the end of the sixteenth century to saltpetre being carried to Europe by Portuguese ships.[2] Its bulk and weight would of course make it a prohibitively expensive commodity to export overland. But the economics of seaborne transport completely altered the picture, and the growth of an extensive munition industry in Europe and the wider use of artillery made Indian saltpetre both a desirable strategic raw material and a profitable article of trade. There is no doubt at all that Dutch and English demand for Indian saltpetre was closely connected with national political and military considerations. Next to indigo and saltpetre, the most important intermediate product imported from India was the Bengal raw silk. The silk yarn produced in the mulberry plantations around the town of Kasimbazar and in north Bengal was famous throughout India and its location had given rise to a substantial silk-weaving industry in the region. The European trading companies were attracted to the area first by the prospect of purchasing the finished silk piece-goods and within a few years extended their trading activities to the purchase of raw silk. The traditional suppliers of silk yarn to the European weaving industry had been France, Italy, and Persia. But from the 1650s Bengal raw silk rapidly established itself

[1] Court Book, 24 October 1645, Vol. 19, p. 353; Court of Directors to Surat, 16 February 1670, Despatch Book, Vol. 87, p. 322.
[2] Moreland [424], 118.

in the market and in the eighteenth century it was the most substantial and valuable import cargo next to textiles.

THE METHODS AND IMPACT OF EUROPEAN TRADE

From an examination of the available quantitative evidence it is reasonable to suggest that the volume and value of European trade with India did not rise significantly before the active participation of the Dutch and English Companies. The size of Portuguese trade in Asia as a whole was not negligible, though compared to the later period it was small and lacking in variety. The organization of the north European trading companies on a joint-stock basis provided an entirely new and stronger institutional foundation for Europe's direct trade with India. In addition, as time went on private European trade in the Indian Ocean intensified commercial competition and appropriated a large proportion of trade which had previously belonged to Indian merchants. Perhaps the most revolutionary aspect of the new development was the introduction of the methods and spirit of the impersonal abstract firm, which radically contrasted with the traditional forms of mercantile organization both in Europe and Asia. The key to the success and long survival of the two East India Companies, Dutch and English, lay in the fact that from the beginning they put all their corporate efforts into the creation of an organizational system which was independent of both time and personnel. As a result, economic decisions were taken on the basis of definite operating rules which covered practically every aspect of trade – the coordination of a complicated shipping schedule, the level of buying and selling prices, future market-trends, the ordering and delivery of goods, and not least the maintenance of carefully planned political relations with indigenous Indian rulers. In spite of the long time-lag between the issuing of instructions in Europe and their implementation to India, the information system was arranged on such a comprehensive scale that the process of decision-making was far from a hit-and-miss affair.

In many way, the joint-stock East India Companies were the precursors of the modern multinational, multiproduct business corporations. Their trade was worldwide and the centralized distribution system linked to wholesale marketing arrangements meant that special steps had to be taken to ensure the standardization of the import goods produced in conditions of individual artisan enterprise. From the point of Indian commercial life, this emphasis on quality control and regular delivery with the risks attached to the suppliers was a relatively novel experience. Of course, the Indian foreign merchants who traded in the Red Sea, the Persian Gulf, or the Indonesian islands were highly

discriminating buyers, as certain types of textiles could be sold only in particular markets. The trading period was also seasonal in all these areas, which required careful timing of the purchases. But where European operations differed from the Indian was in the scale of the purchases and the precise legal meanings placed on contractual responsibilities. In an average shipping season, the quantities of textile pieces ordered by the European companies might easily run into a million. Since most of these were sold in London or Amsterdam in standard bales with only samples being displayed to prospective buyers, the European factories in India devised the 'muster' system to enforce standardization. The usual procedure was to give out contracts to Indian merchants eight to ten months before the expected arrival date of the ships from Europe. In the contract, the precise quality, the dimensions, and the prices of the textiles were entered together with the delivery dates and the names of the merchants. When the cloth was brought to the warehouses, the officials in charge sorted the pieces according to the samples seen before and any deviation from the 'muster' resulted in either the rejection of the piece or in a reduction of its contract price. In the eighteenth century the English Company even resorted to the practice of locking-up the rejected cloth until the whole investment was completed, in an effort to prevent the redelivery of the same pieces when the departure time of the ships drew nearer. The cloth merchants often protested that a too-strict adherence to the sample system involved them in heavy losses, because the textiles were collected in small numbers from individual weavers and even the same weaver was incapable of producing two pieces of cloth exactly alike. As the local markets were not suitable for selling the textile types specially produced for Europe, they were left with a large quantity of unsaleable cloth. But the Indian merchants were not without some bargaining power in this matter. Just as the European Companies with their superior financial resources could command the markets jointly and demand a standard of production difficult to maintain in artisan manufacture, so the indigenous merchants often delayed or withheld delivery until the shipping season was too close. Such tactics implied that the European warehousekeepers either were compelled to accept whatever goods were brought to them or send home half-empty ships, which sharply raised the overhead costs.

One of the main discoveries made by the European companies attempting to develop the textile trade from India in the seventeenth and eighteenth centuries was the existence of a vertical link between marketing and industrial production. The Indian weavers seemed to have adopted two distinct approaches to the problem of adjusting output to demand. There were those who wove traditional and well-known varieties of cloth for the open market. But more often they

appeared to work for particular merchants who provided working capital in return for a guaranteed supply of cloth which was frequently of a special type. The functional distinction between the two systems does not necessarily imply that they were mutually exclusive in practice. The same weavers who worked to order during the busy export season might decide to work at their own risk during the slack months. But whichever system was in operation, it was unlikely that the weaver would be in direct contact with the final customers without any intermediaries at all. Irrespective of whether his source of capitalization was mercantile or self-generated, he was strongly dependent on the wholesale dealers for marketing his products. The system of commercial advances has been described as an Indian version of the *Verlagssystem* or the 'putting out' method in Europe. But the merchants almost always advanced cash sums and not raw materials under the traditional contract relationship. There seems to be two reasons for the operation of the financial advance system. It is unquestionably true that the weavers needed working capital both to buy raw materials and to support themselves during the time the cloth was being woven. But even more important was the role played by the advances in securing the cloth in large-enough quantities. It was a contract that imposed definite obligations on both sides. Just as the merchant was assured of receiving his supplies on time with a reasonable degree of certainty, the weaver on his part regarded the advance as a deposit on orders. The trading companies fully realized the indispensable necessity for giving out contracts beforehand and sealing the agreements with large financial advances. But they seldom attempted to approach the weavers directly, and preferred to employ either Indian brokers who purchased on a commission basis or regular cloth merchants often operating as collective groups.

A review of European trade in India gives the impression that it was only in the first half of the eighteenth century that its full impact was felt on the domestic economy. An Italian nobleman travelling through India commented in 1624, on hearing that the English had captured some Indian shipping as a reprisal to Mughal exactions in Surat, that it was a mistake to follow such methods too far, because the '*Mogol* is a very great and wealthy King, whose Revenuews arise from his own Lands and not from the Sea; and one to whom that little which is to be had from the Sea...is nothing...because it accrues rather to some small Captain of his, as the Governour of *Surat*, and the like, than to the King himself'.[1] Later, after the short war with the Mughal empire, Sir John Child, the Governor of Bombay, admitted that one of the reasons why English reprisals at sea were not so effective was due to

[1] Della Valle [88], II, 418.

the fact that the Mughal emperor did not at all value trade and that the people on the western side of India were not so poor as to starve for lack of trade.[1] This kind of attitude to European trade was also reflected from the pen of a Muslim visitor to Bombay (1694) who remarked contemptuously that the total revenue of the island did not reach more than 3 *lacs* of rupees and that 'the profits of the commerce of these misbelievers, according to report, does not exceed twenty *lacs* of rupees. The balance of the money required for the maintenance of the English settlement is obtained by plundering the ships voyaging to the House of God.'[1] The truth of the last statement can be disputed, though not the general attitude. But by the middle of the eighteenth century, the volume of European trade, both Company and private, had increased to the extent where the Indian rulers derived a considerable revenue by taxing the merchants and weavers. The expansion was at its greatest in Bengal, which was one of the most prosperous provinces in the Mughal empire before the Maratha invasions of the early 1740s. The large annual purchases made by the English, Dutch, and the French had greatly stimulated the textile industry which probably provided employment to a sizeable section of the population. That the effect of the huge bullion imports of the European companies into Bengal was beneficial to the economy was not lost on the English Company. For in 1748 the court of directors wrote to the Calcutta council, 'The Nabob cannot but be sensible that his Revenues are supported chiefly by the Immense Sums we yearly import into his Dominions and must know what a stagnation it would create in his Finances, if Calcutta were to be taken by the French and laid waste in the manner Madras hath been.'[3]

2 Indian merchants and the trade in the Indian Ocean *c.* 1500–1750

A fact of life with which the student of India's medieval economy has learned to live is the absence of statistics. The history of foreign trade therefore becomes a discussion of the structure of commerce and the role of the merchant in it. And from what we gather by way of qualitative statements, it would seem beyond doubt that the Indian merchant investing in the trade of the Indian Ocean was the most important figure in the country's overseas trade during the sixteenth and seventeenth centuries. It was in the eighteenth century that Indian shipping and the Indian Ocean trade declined in importance to make way for European carriers and trade with Europe.

[1] Bombay Council to the Court of Directors, 7 January 1689, Original Correspondence, Vol. 48, No. 5671, p. 5. [2] E & D, VII, 354.

[3] Court of Directors to Calcutta, 17 June 1748, Despatch Book, Vol. 110, paras. 5–6, p. 124–5.

At the turn of the fifteenth century, India's mercantile marine, largely in the hands of Gujarati Muslim merchants, appears to have been deployed principally in the middle Indian Ocean, dominating the sea-lanes between Cambay and Malacca. To the west, Indian ships called regularly at the ports of the Red Sea and the Persian Gulf, but the carrying trade in the Arabian Sea was largely in the hands of Arab shipowners. In the east, Chinese vessels excluded all others between southern China and Malaya, while Malay and Javanese craft were prominent in Indonesian waters. The loosely-jointed structure which supported India's overseas trade would seem already to have assumed the form it was to retain for the ensuing 300 years. Moreover, the important distinction between coastal India's shipping interests, which were by and large Muslim, and the shore-based merchants feeding the shipping lines, among whom Hindus predominated, endured throughout the period. But partly through large-scale political changes within Asia and partly as a result of European intervention in the Indian Ocean area, the deployment of Indian shipping changed from time to time, fortunes of particular ports and their immediate hinterland fluctuated sharply, and Indian maritime trade waxed and waned within the structure evolved and sanctified by tradition. European trade in the Indian Ocean remained part of the traditional structure, which was enriched and strengthened through European skill and enterprise. Major alterations would only come with the establishment of empire.

The Portuguese and their north European successors to the supremacy of the Indian Ocean trade have left enough documentation for the historian of India's maritime trade to reassemble the outlines of the Indian commercial structure and to indicate the broad alterations in the course of Indian commerce over time, but the task can only be approached in the depressing awareness that the documents are primarily concerned with the operations of official agencies, like the *Estado da India* of the Portuguese or 'the Companies' of the other Europeans. Of inestimable worth to historians of India's trade with Europe, such materials offer little to the student of the Indian Ocean. European private trade, a vital factor in the situation, is not caught in such officialese. The trade of the Indian merchant in the Indian Ocean is, of course, much beyond the pale. The totality of Indian maritime trade would, however, comprise an understanding of all the three levels. Such total vision may not be for mortals, and in any event the reconstruction of the story of the Indian Ocean would appear to be the most unpromising effort given the outlandish slant of the available documentation. The gloom deepens when we remember that whatever documentation there may be is untrustworthy, its narratives warped by personal considerations and its figures swelled by individual greed.

None the less, the detailed Portuguese chronicles of the early years of the sixteenth century are still the best introduction we have to the previous hundred years. It is indeed wise to remember, as I. A. Macgregor wished us to do,[1] that in his *Suma Oriental* (*c.* 1515) Tome Pires was pleading a case and was building up the importance of Malacca and the Indonesian archipelago at the expense of China for the edification of King Manuel of Portugal. There can, however, be no doubt that the emergence of Malacca as an entrepôt where Indian, Chinese and Javanese met to exchange their wares, was the most important development in the history of the Indian Ocean during the fifteenth century. Among Indians, the shipping was of course dominated by Gujarati Muslim merchants but a large number of Hindu merchants visited the port from the Coromandel Coast, while other Indians came from Bengal. Arab and Persian merchants usually journeyed to Cambay to take ship to Malacca but direct sailings between Malacca and the Red Sea were known. In fact, Albuquerque claimed in 1512 that as many as fifty ships sailed every year from Malacca for Mecca at the turn of the century, which was certainly a substantial exaggeration.[2] The main aim of both the Indians and Chinese was to buy spices from the Indonesians, but some trade took place between them as well. Besides buying cloves, nutmeg and mace, Indian merchants took home Chinese porcelain and silks. Indian textiles, the principal commodity in demand in the Indonesian islands, probably did not sell in China, and 'the Gores' of Tome Pires, who bought Bengali fabrics at Malacca, were either Japanese or from islands near Japan. Chinese demand for pepper was, however, considerable, and of the large amount they bought at Malacca some may have come from Malabar. It is possible that the Chinese merchants were interested in Indian opium. Sandalwood sold well to the Chinese, as did various types of incense, besides rarities like cornelian from Cambay.

It does not, therefore, seem that trade between India and China at Malacca was considerable, although there is the possibility that Chinese merchants bought Indian textiles to barter for Indonesian spices. Indian shipping did not penetrate the China Seas at the time, and the Chinese overseas traders were themselves struggling against the efforts of the Ming dynasty (1368–1644) to restrain all foreign trade. Early in the fifteenth century the Chinese imperial attitude to maritime trade had been quite different. The energetic emperor Yung-lo (1402–24) had taken a keen and personal interest in asserting the Chinese presence in the Indian Ocean as part of his overall strategy. Between 1405 and 1433

[1] Macgregor [396], 172–99.
[2] Affonso de Albuquerque to the King of Portugal, Goa, 8 November 1512, in Danvers [279], 3.

the able Muslim eunuch Cheng-ho scoured the Indian Ocean as many as seven times at the head of powerful Chinese armadas, often comprising sixty sail and over 20,000 men. Besides calling at various south-east Asian and Indian ports, the Chinese fleets reached Hormuz, Aden and the east coast of Africa. Among other things, these missions were intended to encourage the Indian Ocean states to come to trade in China and at the same time to discipline private Chinese merchants who belonged to a pirate fringe. This energetic maritime policy was, however, gradually given up during the 1420s when the Ming capital was moved back from Nanking to Peking and the Mongol menace in the north claimed the attention of the Chinese emperors. Piracy in the China Seas, which had been one reason behind the Ming *démarche* in the Indian Ocean, intensified with the virtual withdrawal of the imperial navy. The so-called Wako pirates, based in Japan, operated freely all along China's southern and eastern coastline. It was to counter these pirate attacks that first the Mings and then the Manchus (1644–1911) tried to insulate China from the sea. Chinese private merchants, however, persisted in the face of imperial edicts forbidding maritime trade but the Chinese junk traffic was confined to the sea-lanes to the east of Malacca.

The Indian ships were not sturdy enough to withstand the typhoons of the China Sea, nor adequately armed to deal with the Wako marauders. Besides, the limited Chinese demand for Indian goods was adequately conveyed by the Chinese junks which visited Malacca. Indian textiles, however, clothed both the rich and the poor in south-east Asia, and Indian vessels called regularly at Pidie in north Sumatra and almost certainly at the neighbouring port of Pase. In western Sumatra, Gujarat ships visited the four small seaport principalities of Priaman, Tiku, Baros and Singkel, as Tamil shipping had done centuries earlier. As for the Spice Islands themselves – the Banda islands producing nutmeg and mace, and Amboina,[1] Ceram and the Moluccas growing cloves – there was no direct Indian shipping in the area. But by the end of the fifteenth century these islanders had specialized almost exclusively in the production of spicery and depended on the regular supply of Indian textiles and Javanese grain for their daily living. In the main it was Javanese shipping which conveyed Indian cloths and local foodstuffs to the Spice Islands to barter for spices. The southern Javanese port of Grise, conveniently commanding the channel between Java and Madura, established a monopoly in the spice trade to Malacca. Indian vessels had called at Grise earlier but as with many another port in Indonesia, they had withdrawn from the navigation with the rise of Malacca, preferring to obtain their requirements at the Malay entrepôt.

[1] The clove cultivation in Amboina was a development of the sixteenth century.

Indian merchants who had settled at Grise, however, were involved with the Javanese in managing the spice monopoly. Thus at the close of the fifteenth century, Indians with their large concentration upon Malacca, their regular voyages to Sumatra and the strong connection they had with the Javanese port of Grise, maintained a strong presence in south-east Asia.

In the west, Indian trade flowed along the two established maritime channels, one through the Red Sea, Cairo and Alexandria, and the other through the Persian Gulf and up through Basra and Baghdad. The north of the Red Sea littoral was controlled by the Mamlūk sultans of Egypt and Syria (1260–1517), while in Yemen in the south the Banu Tahir dynasty supplanted the Rasūlids in the middle of the fifteenth century. In between, the Sharif of Mecca and the sharifian family ruled in Hijaz, enjoyed bouts of family feuds and usually conceded suzerainty to the strongest available Muslim power, in this case the Mamlūks. At this time and afterwards, Indian merchants brought their wares to two rather different markets in the Red Sea. For one, there was the market of the *ḥajj* to which long-distance caravans converged from the entire area now known as the Middle East, and Muslim pilgrims arrived from the Indian Ocean littoral as well. It was through this conveyor belt that Indian produce and goods transshipped in India found their way to the European market. Besides this long-range network, Indian commodities were sold in a regional market which included the towns of Hijaz and Yemen, ports like Suakin, Massowa and Zeila on the African coast of the Red Sea, and the towns of the Hadramaut coast like Shihr, Kish and Zofar.

The carrying trade between the Red Sea and the west coast of India was dominated by a Cairo-based mercantile organization called the Kārim, but they had no monopoly in the traffic. In fact R. B. Serjeant has shown from the evidence of contemporary Arabic chronicles written in Hadramaut, that Indian vessels called regularly at south Arabian ports and Gujarat Baniyas had settled already in the area by the fifteenth century.[1] The shipping of the Kārim would seem to have been very largely in Arab hands, though S. D. Goitein has amassed enough data from the document of the Cairo geniza to demonstrate that the India trade itself was extraordinarily cosmopolitan in character in which even minority groups like Jewish merchants working with their 'Hindu brothers' and 'Muslim friends' could achieve an important position.[2] It seems possible that the Kārim which had come into existence late in the twelfth century, was already under serious pressure towards the close of the fifteenth century, before the Portuguese appeared in the Indian Ocean. There is some evidence to show that in the later fifteenth

[1] Serjeant [490a], 32–5.
[2] Goitein [318], 175–229.

century the Mamlūk sultans attempted to obtain more money from the mercantile communities under their administration than the trade itself could support. It has in fact been suggested that the Kārim ceased to exist as early as the 1470s.[1]

No such dramatic changes were presumably occuring along the Persian Gulf route where the island-emporium of Hormuz had become the centre of a miniature maritime empire, commanding the allegiance of the important entrepôt of Muscat on the other side of the Gulf and stretching nearly as far as Basra at the head of it. Indian vessels called at Hormuz and Muscat, and Gujaratis settled in Persian towns, much as they did in the Red Sea. Persia itself was, however, in a state of considerable political confusion which put the interior of that country more or less beyond the reach of the Indian merchants. The trade of the Gulf was thus much more of a transit trade, aimed at the towns of Mesopotamia and beyond than was the case with the Red Sea commerce. From what descriptions we have, however, of the Persian Gulf trade of the period, it would certainly seem that Hormuz was nearly as important an entrepôt as Malacca in the eastern Indian Ocean, while Aden was already in its lean years. For Indian shipping, of course, the western orientation had not yet come, and compared to the concentration upon south-east Asia, the presence maintained in the west was not impressive.

Before we turn to consider the Indian ports themselves and the structure within India which supported the trade overseas, it is well to note the small enclave of Indian trade which had already formed on the east coast of Africa. Gujarati shipping called at Kilwa, Mombasa, Malindi and Pate, probably as part of their round voyage to the Red Sea, and obtained gold and ivory in exchange for textiles. These Swahili city-states were largely Arab and were the creations of men from Hadramaut although some claimed, and still claim, Persian origins. This east African trade as it was done immediately before the Portuguese came upon the scene only emphasized the cooperation between Indians and Arabs in the western Indian Ocean, a peaceful sharing of profit which was soon to be overshadowed by other means of doing business.

Just as Indian merchants traded and settled more or less freely in Arab territories, Arab merchants were welcomed all along the west coast of India. Cambay, which was by far the most important Indian port of the period, had large colonies of Arab and Persian merchants dating back to the tenth century. The prosperity of Cambay had been legendary for centuries before it became the principal outlet to the sea for the sultanate of Gujarat (*c.* 1403–1573), but by the close of the fifteenth century the port was already moribund due to silting, and ocean-going

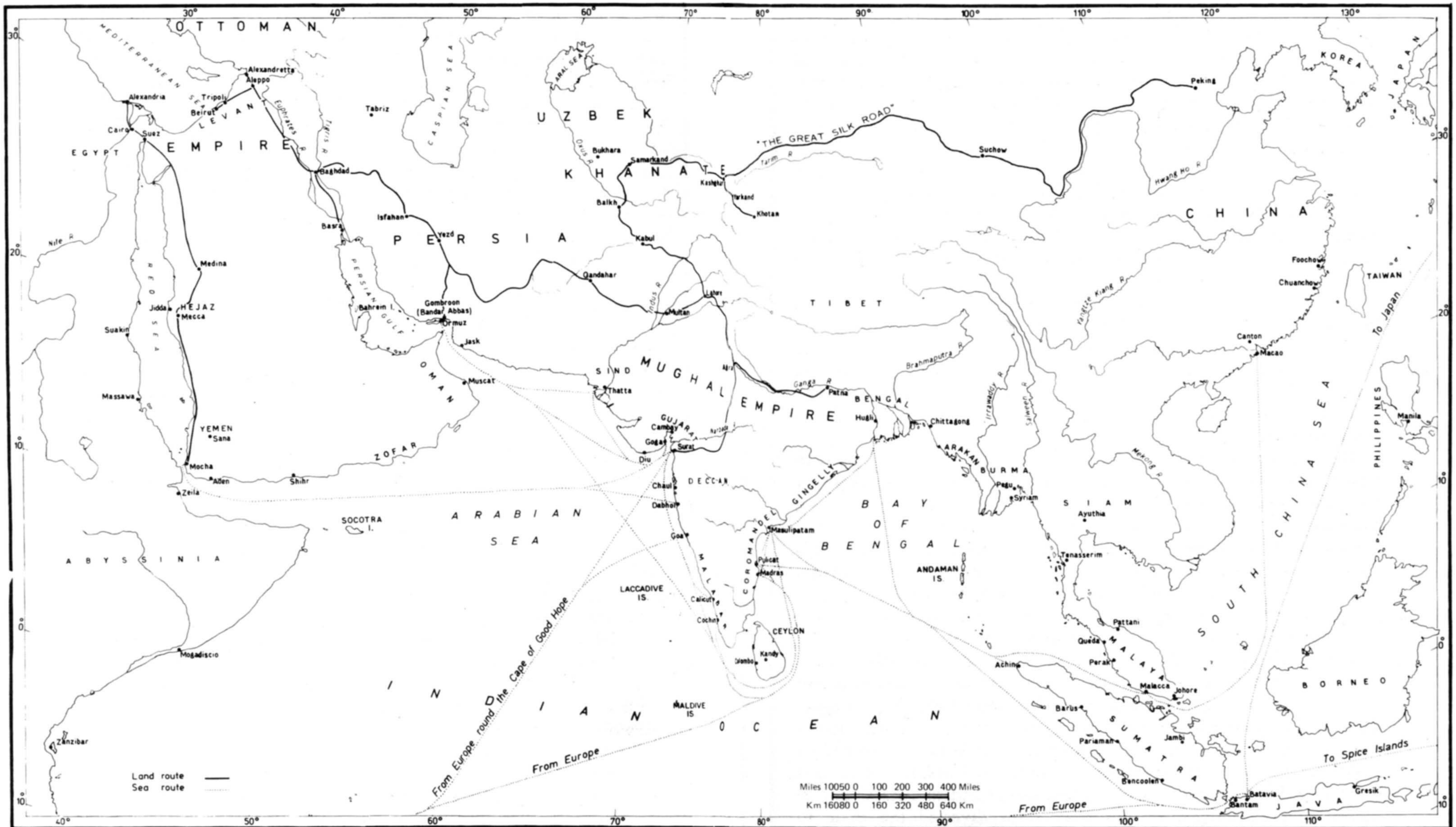
[1] Fischel [299], 157–84.

ships were using the roadstead of Gogha facing the Cambay harbour for anchorage. Something of a race appears to have started between the twin cities of Surat-Rander on the one hand and Diu on the other to see which of them would replace Cambay. Diu, under the able administration of the Georgian convert Malik Ayāz, had built itself up as an important centre for the Red Sea trade, while Surat, under the astute Brahman Malik Gopi, hoped for the destruction of Diu in order to safeguard its growing prosperity, based on the same commerce. Farther down the coast in Konkan and north Kanara the four roadsteads of Chaul, Dabhol, Goa and Bhatkal served the needs of the two sultanates of Ahmadnagar and Bijapur, besides the empire of Vijayanagar. In Malabar the dominating presence belonged to Calicut which would seem to have been the principal rendezvous for the Kārimī merchants in India. It is possible that Arab ships enjoyed a monopoly of the Malabar–Aden run, starting from Calicut, while they shared the routes emanating from Konkan and Gujarat.

On the eastern side, Pulicat and Negapatam were the principal ports of southern Coromandel. Pulicat and Bhatkal had the distinction of being the eastern and western outlets for Vijayanagar and enjoyed the prosperity that went with it. It is possible, but by no means certain, that Masulipatam in north Coromandel had already established itself; at any rate it was to do so soon enough. There is also some obscurity about the exact position of the Bengali ports of which Satgaon and Chittagong were certainly the principal ones, but probably Sripur, which served Sonargaon, the eastern capital of Bengal, was already functioning at the close of the fifteenth century. As with Cambay in Gujarat, the port of Satgaon which controlled the outlet of the Ganges was already dying a natural death and merchants were looking for a more convenient anchorage farther downstream. Besides these major centres of oceanic commerce there was the Lahri Bandar complex in Sind, which had lost its former splendour,[1] while it is well to remember that each important Indian Ocean port was supported by a string of subsidiary roadsteads which had the function of assembling and distributing the exports and imports of India's maritime trade.

Of India's exports to the markets of the Indian Ocean three points are worth noting. First, as to India's major export, which was textiles throughout our period, the mass of it was of the coarser kind. In Indonesia as well as the Red Sea it was the commoner people who were the overwhelming majority of India's customers and the more expensive varieties did not sell well. For instance, the Dutch Company relying on the costlier cloths of Coromandel could never compete with the

[1] For an indication of later prosperity and Aurangzeb's attempt to revive the Indus trade in 1648–52, see J. Sarkar [475], I, 68.



Faiz Habib

Map 10 Asia and the Indian Ocean: major trade routes and ports, seventeenth century

Gujaratis at Mocha because Gujarat specialized in the production and export of the cheaper varieties. The evidence from the Red Sea during the seventeenth and eighteenth centuries in fact indicates that the preference for cheaper goods was not confined to textiles but extended to the entire range of commodities. This does not mean that the more expensive goods, for instance the fine cloths in which Bengal and Coromandel excelled, were not in demand among the Asian aristocracy. Travellers who wrote enthusiastically of the trade in such luxuries were by no means fanciful; but the fact is that the mass of the trade was in cloth about which no one would write home.

Secondly, India exported common foods like rice and pulses, wheat and oil, for which there was considerable demand. Bengal, Orissa and the Kanara coast to the north of Malabar were the major grain-surplus areas, and besides supplying deficit pockets along the Indian coasts, like Malabar or on occasions Surat, such exports helped feed cities like Malacca, Hormuz and Aden. It was acknowledged that the trade in foods fetched very little profit, even keeping in mind that profits in the Indian Ocean trade tended to be low in any case, but in years of scarcity it was as advantageous as any other. To this we may well add the trade in coconut products and the lesser spices like ginger and turmeric. The picture that emerges from these considerations is one which emphasizes bulk trading in goods of the cheaper kind, and also one which underlines necessities rather than luxuries.

Thirdly, the pattern of Indian exports like most other things with which we are concerned, appears to have remained stable throughout the period. Besides the items we have already considered, Bengal exported sugar and raw silk, Gujarat exported raw cotton, while Malabar sent out its pepper to the markets in the Indian Ocean. It is possible, however, that as far as cotton and silk were concerned, Gujarat and Bengal mutually exchanged their produce without much of either going out of the country. Indigo was exported from Bengal and Coromandel as well as Gujarat. Each major port had its list of minor exports of which one could mention wax and lac from Bengal and skins from Coromandel, but these were of no overall significance. An important development during our period of which we shall speak again later was that of Indian merchants losing the carrying trade in the major spices in the Indian Ocean. The importance of textiles thus came to be heavily underlined in the seventeenth century. Besides, Indian carriers lost the trade in pepper to a substantial extent and to a lesser degree the carriage of indigo, as European ships diverted the trade to Europe.

Indian imports were limited to bullion, spices and horses, besides minor items like tin from Malaya, ivory from eastern Africa and

dyewoods in the main from the Persian Gulf. As with exports, a close look at lists of imports of particular Indian ports would, of course, reveal many more commodities, but it is reasonable to hold that wines, rosewater, fruits or medicines did not do much apart from making the lists impressive. What is important for us is to grasp the crucial significance of the west Asian market for Indian import of bullion. It was indeed with much justice that Mocha was called 'the treasure chest of the Mughal'. The Persian Gulf also yielded a rich bounty of precious metals, and it was on these markets that India depended for the inflow of the much-needed currency. The trade with eastern and south-eastern Asia showed no overwhelmingly favourable balance and there is some reason to believe that at times India had to pay for her import of spicery with money, especially when the Dutch were in control of the trade. European import of bullion was not substantial enough to make a difference in the overall picture and the development of new Indian Ocean routes by the Europeans appears only to have added a small amount of Japanese copper to Indian imports.

Upon the whole the trade in the Indian Ocean remained firmly in the hands of the Indian shipowning merchants with only an occasional flutter, especially in the early sixteenth and early seventeenth century, when the Europeans threatened to cut in. Several factors seem to have worked towards the vitality of Indian shipping, not the least of which was the higher freight rates charged by the Europeans. Evidence from the turn of the eighteenth century indicates that European rates could be double the rates charged by Indian owners. Besides, Indian merchants preferred to stick to the ships owned by men of their own communities because a sharp difference in the customs known to the freighter and the owner, not to speak of differences in language, could cause grave complications. Further, it was the practice of Indian freighters to split their risks even by distributing their freight among the available shipping. And it is always useful to remember that the orderly world of the official European documentation concealed a very different reality, and Indian merchants were occasionally embarrassed by private demands made by European naval officers of which the Companies knew nothing. It is, of course, true that European ships were better sailed and better defended, and on occasions such qualities earned them considerable custom, but over the entire period these made no significant difference.

The vitality of Indian shipping notwithstanding, investment in shipping was not popular among Indian merchants. The main handicap was in the fact that ownership was almost invariably individual. Shared proprietorship was known but on the whole a rare phenomenon in our period. Data on prices of ships, as with everything else of this nature,

are scarce and unreliable, but it seems safe to assume that owning a ship locked up a substantial part of a merchant's trading capital. The returns on the investment were relatively poor, perhaps never more than 30 per cent in a good season, while the corresponding profits in the trade of the western Indian Ocean would be at least 20 per cent more. Shipowning was not yet a distinct form of investment and probably because the insurers were small people working individually, there does not seem to have been any insurance of ships as distinct from that on cargo. It is thus easy to see why there would be a real reluctance to invest in shipping and with the solitary exception of the Mulla family of Surat, Indian merchants did not own more than one or two ships however affluent they might be.

If we turn now to the ports which carried India's maritime trade during the fifteenth century, it is interesting to note that they served hinterlands which were sometimes substantial but always fragmented. In the west the Sultanate of Gujarat and in the east the independent Kingdom of Bengal (1368–1576) were good illustrations of it, as were of course the empire of Vijayanagara and its enemies, the successor states of the Bahmani kingdom in the Deccan. Besides, a social fragmentation had developed in maritime India during the 500 years prior to the arrival of the Portuguese in the Indian Ocean, which was to have important consequences in the period we have under review. Islam had come to the Indian coastal society through peaceful, commercial means and had converted more or less the entire seafaring population by leap-frogging along the trade routes from Gujarat to Bengal. Indian shipping was now overwhelmingly Muslim and this meant most shipowners as well as the seamen. Shore-based Hindu merchants were not necessarily men who never went abroad, but they followed general lines of trade which fed the shipping in the Indian Ocean and did not, except in a small way or in a particular area like southern Coromandel, themselves operate ships.

Indian merchants who travelled across the seas fell into three different economic categories. Firstly, there were 'the substantial merchants', who travelled in style with their valuable cargoes and establishment of domestics, claiming and often obtaining special treatment on board as well as in the Indian Ocean ports. Secondly, there were the merchants who travelled as agents of their principals, who were not on board either because they were managing their businesses at home or because they were travelling elsewhere. There was naturally some overlap between these two kinds of men. The *nākhudā* on board an Indian vessel combined the features of both the types in that he was almost always an eminent merchant in his own right, while it was one of his duties to act as the agent of the shipowner; he would act as commission-agent

for other merchants as well.[1] The third comprised the small merchants who invariably provided a ship with the majority of its passengers. Travelling as they did with their bale or two of textiles every year on the various ocean routes, they conjure up the classic figure of the Indian Ocean traveller made immortal by Jacob van Leur. It is, however, necessary to remember that men who travelled purely as factors of other merchants, earning no more than a commission on the proceeds of the transactions, were not necessarily the majority among the small men. In fact, it seems possible that for the most part such men owned what they sold or traded on respondentia. The host of small traders was swelled by the common sailors, their headmen and the petty officers on board Indian ships, all of whom were allowed free space for small cargoes to supplement their meagre wages. These 'little men' were, however, overshadowed in the eyes of the contemporaries by the presence of rich and influential merchants who were, contrary to what Van Leur believed, just as non-political as the rest.

The world on board an Indian vessel reflected Indian society and, in particular, the world of the overseas trader. Merchants interested in foreign trade were overwhelmingly small men but each Indian port was dominated by a few wealthy traders. The small men, because they were small, investing little and profiting less, could never be driven out of business, and the power of the great was circumscribed by the ubiquity of the small. A major reason why, for instance, 'Abdu'l Ghafūr, Gujarat's greatest merchant and shipowner at the close of the seventeenth century, was unable to establish a monopoly in his favoured Red Sea trade was that he was unable to cope with the multitude of small traders, many of whom he managed to drive into bankruptcy. It was a merciless world of almost unrestrained competition which often degenerated into feuding. But social custom as well as material condition saw to it that the apparently weak and inefficient retained their rights against the enterprising entrepreneur who received no assistance from legal and political coercion. Thus, even contracts as between merchant and weaver were not binding provided the weaver returned what money he had received as advance payment from the merchant, before going over to the high bidder. It was only in the 1730s when the English with some political influence, if not power, began to chastise all breaches of contract as they understood them that concepts of a new law were introduced in the Indian world.

The social and economic structures which supported India's overseas

[1] On an Indian vessel the man in charge of the ship's navigation was called the *sarang*, while the *taṇḍel* was the headman of the sailors. Socially such men were far inferior to the *nākhudā* and as such each of the latter, although often a landlubber, wielded supreme authority on board. In this the Indians were closer to the Portuguese ethos than to north European practice.

trade was based essentially on cooperation and conciliation which set certain limits to enterprise but allowed for maximum competition within these limits. The shipowner-merchant and others dealing strictly in imports and exports relied on merchants and brokers who specialized in supplying a port with specific commodities. The bigger the business, the larger was such reliance upon the intermediaries. There was no difference in this as between an Arab, a Persian or, for that matter, an Indian shipowner and the European concerns. Each would be tied to an alter ego in the shape of a general broker who would operate a vast network of middlemen to supply his principal with the range of commodities desired for export, or help sell the varieties of goods imported. This combination of a merchant with his broker always worked hand-in-hand with the fraternity of money merchants who took charge of assaying coins, of coining the imported bullion and transferring funds. The hinterland of ports like Surat which eventually succeeded Cambay, and Hugli, which came to replace Satgaon, stretched over the entire north and west of the sub-continent, and the men of the ports were obliged to fall back on a host of others who produced, processed and transported their goods. In this complicated network each man had his post and was indispensable in it.

In understanding India's overseas trade it is necessary to appreciate the importance of the individual and the power of the specialized, local networks within the interlocking mechanism which kept the trade going. To take an example at the port itself, the *ṣarrāfs* of the mint, to whom the importer of bullion went to have his Mughal rupees coined, were men of great consequence. In theory the Mughal mint was accessible to everyone and there was a *dārogha* to supervise its operations and collect the nominal charges made for its use. In practice, of course, rich and regular importers had privileges which the commoner lacked, and the actual running of the mint was in the hands of *ṣarrāfs* who farmed the minting rights. Evidence relating to Surat in the eighteenth century indicates that the importer dealt with the *ṣarrāfs* and made terms afresh for every transaction. The *ṣarrāfs* of the mint charged the importer for the minting time which could be as long as six months. As bullion was usually imported at Surat mainly from the Red Sea in the months of August and September, there was a rush to have money minted at this time and the *ṣarrāfs* drove as hard a bargain as they dared. In 1720–1 the Dutch factors at Surat, while negotiating a transaction with the *ṣarrāfs* exchanging Spanish rials for Mughal rupees, said: 'The price of this coin remains unchanged, but the difference lies in the time, sometimes the purchaser of rupees being obliged to agree for one hundred days and more, according as the mint has more or less work to cope with.'[1]

[1] Letter from the Dutch lodge at Surat to the Council of the Indies at Batavia, 12 April 1721, Kolonial Archief 1855, p. 37, at the Algemeen Rijksarchief, The Hague.

Far away from the ocean ports, nestling close to the indigo-fields, stood small towns with their local brokers on whom the merchants were obliged to depend in purchasing the dye. Buying indigo at the close of the seventeenth century, as Matheus van Heck explained from his twelve-year experience of the Gujarati countryside,[1] was an extremely risky business because you never knew how much sand, oil and woodshavings were coming to you mixed with the blue. The man to guide your steps in your negotiations with the manufacturers, at the time you tested what they offered and in the process of weighing and storing what you bought, was the local broker who would rent you his warehouse and serve as your factotum as long as you stayed in his *qaṣba* or small town. It was quite impossible to get round this little man, no matter how consequential you were or where you came from.

In some sense the influence of money in a structure like this was at every point restrained by the need for 'local assistance'. On the other hand everyone in the chain, be it the peasant who sold his indigo at the village market, the weaver who made one piece of gold-embroidered cloth in a season or the principal broker in a line of textiles, fiercely claimed his right to sell to the highest bidder and insisted on every little allowance sanctioned him by custom. We do not know whether, in the course of the 250 years that we have under review, any eccentric tycoon of the coastal cities, unmindful of the extreme instability of his foreign markets and undeterred by the mores of his society, attempted to break the chain, but the fact remains that at the end of the period the chain was unbroken: no one had succeeded in centralizing and directing production or controlling distribution. The autonomous man of the Indian market-place was never turned into an employee of another. Government and society silently underwrote the right of every individual to work at the post to which he had been born and to the profits of which he was entitled. The Indian world was governed by its unwritten law, its *qānūn*; it was left unmarked by the innovating spirit, unchanged even by despotic caprice.

The government, in fact, seldom interfered in the affairs of the merchants, provided there was peace at the ports and the official revenues were smoothly gathered in. We must, in this context, remember that India never had the kind of coastal states which characterized, say, the Indonesian milieu or the Red Sea. Of the only two Indian possibilities, the rulers of Calicut throughout maintained a stance of strict neutrality in matters of trade, happy to live off what prosperity it brought to their port while the Sultanate of Gujarat wished only to become a continental state and could be persuaded fitfully and with much labour to remember its maritime interests. Golconda or

[1] Matheus Van Heck's memorandum on the production of indigo was published by van Dam [37] R.G.P. 83, 73 f (appendix).

Bijapur, Vijayanagar or the Mughal empire never had a serious interest in maritime trade and usually relegated all matters relating to the sea to their local administrations. In an emergency which called for central assistance, it was the local administration and the regional network of mercantile interests which tried frantically to persuade the olympians to intervene, not usually with the kind of success they desired. The total absence of an Indian navy, willing and able to protect India's considerable commercial marine, was, of course, a natural corollary to this continental attitude.

The absentmindedness of the powerful Indian governments went hand in hand with sporadic interference in the world of overseas trade. Such interference varied from region to region and from time to time; it created an occasional difficulty but did not amount to a permanent problem. Local administrators like Mīr Jumla of Golconda or Prince 'Aẓam in Bengal, took advantage of their official position to earn an unusual profit in trade. Such attempts at official enrichment was however exceptional, although conditions in the Coromandel Coast were much worse than elsewhere. By and large the ethos of the *amīr* would not permit an aristocrat to involve himself closely in trade and earn the odium of being a Baniya. There was persistent aristocratic investment in trade – shipping in later seventeenth-century Bengal, for instance, seemed largely owned by Mughal officials – but it was from a distance, and the money intended for a flutter in overseas commerce was usually handed over to a merchant to be 'managed'. Only the coastal state of Travancore flouted all precedents by establishing a state monopoly in trade during the 1730s. But compared to the mass of India's maritime trade over centuries, Mārtaṇḍa Varma's Travancore was an interesting exception which proved an important rule.

The Indian overseas merchant therefore neither enjoyed the patronage of his state nor did he go in fear of his government. The Hindu Baniya, trembling in fear of 'the Mughal', unable to accumulate and hand on property due to the fell attention of the government, is a figure largely conjured up by the ill-informed imagination of a few among India's western travellers. Large properties were freely accumulated in maritime trade, and whether Hindu or Muslim, such accumulations were dissolved in three to four generations. Disputes within the family and misfortunes in trade, rather than official oppression, usually accounted for the brittleness of mercantile property, except in the years of crisis when the Mughal empire was dissolving. The Baniya ethos was one of great austerity: one could not easily tell a millionaire from a commoner. So it was under the Mughal empire, so it remained under the British Raj. The only extravagance the Baniya would permit himself came in the wake of a death or a wedding in the family. The family deity accumulated

ornaments which descended with the idol from generation to generation. But Hindu mercantile thrift restrained even the urge to accumulate merit. As Ananda Ranga Pillai, Tamil merchant of Pondicherry, noted of a fellow businessman: 'he spent lavishly for his god because he had much to spend'.[1] The Muslim merchant, on the other hand, was free of such inhibitions and the wealthier among them lived like aristocrats and wielded some political influence. It was difficult even for the more despotic of the local governors to fleece men of this class. Money, therefore, was hoarded only a very little among Indian merchants, and if it failed to make an appreciable impact on society it was not the fault of the oriental despot.

The use-value of money was, in fact, keenly appreciated and there seemed to be a perennial problem about the quantity of money available for trading in the coastal cities, in spite of the substantial annual imports from abroad. The rate of interest, therefore, like most other factors in overseas commerce, was seasonal in character and linked to the arrival and departure of shipping. Whatever was imported in the way of money, in what was probably the heyday of Indian maritime trade in the later seventeenth century, was at once absorbed in the process of providing advances to weavers, meeting respondentia obligations and in starting a new cycle of lending to provide for shipping in the ensuing season. The thought that money was going out of the country was abhorrent. Thus the money merchants of Surat would not allow the Dutch to export Mughal rupees although the Dutch Company wished to buy it for spices and use it as currency at Batavia.

In this system, therefore, prices were fixed freely and depended partly on the vagaries of nature and partly on the eccentricities of the markets abroad. The price of grain was the most important factor in fixing the price in the export market during any season. Besides, the harvest of cotton and indigo, and the production of silk, affected the calculations of the merchant. Given a good harvest at home, the merchant had further to consider the likely behaviour of the markets abroad. For the most part such markets were small, unstable and unpredictable. Given that wars were recurrent and brigandage ubiquitous, transport was obviously the weakest link in the far-flung network of the Indian Ocean trade. Not much in the way of rational calculation could be made even with the most up-to-date commercial intelligence, which had of necessity to be at least a couple of months old by the time it reached the producing area. Nils Steensgaard underlines the dependence of even the more affluent merchant upon the caprices of a violently fluctuating market and sees in this the true peddling character of the trade. And

[1] For the citation and a brief discussion of related issues see: Das Gupta [334].

P. J. Marshall accounts for the developing differences between Europe and Asia in the seventeenth and eighteenth centuries in the persistence of an altogether unpredictable market in the Indian Ocean area.[1]

Rich and poor, Indian merchants accepted uncertainty as the basic fact of life and they fiercely competed with each other to gather and conceal for themselves whatever they could learn of the possibilities of the coming season. As a general rule, weavers obtained what can be called their basic contracts during the rains and a variable amount of work in the autumn when the shipping returned with some information from abroad. The expectation of a good *ḥajj*, for instance, would make for frantic buying in the months of September to January, while news of political unrest in the Ottoman empire or the Persian Gulf would at once create a depression in the overseas markets in India.

It is important in this context to distinguish between two different methods of purchase prevalent among overseas traders. Substantial merchants undertaking annual voyages bought usually through the system of 'advance payment', while lesser men and unexpected callers at an Indian port would buy from the ready-money market of the city. Concentration upon the papers of the European concerns, who as large-scale and regular buyers used the system of buying on time, tends to obscure the existence of the other market, which was important enough in all the major Indian ports. It seems possible that apart from the unexpected arrival of foreign shipping, the smaller merchant buying speculatively in the mass on the prospects of a 'good season' abroad could cause major upsets in the export market during the winter and the spring, which 'contracts' had little power to prevent. Further, rings of sellers operated in the wholesale markets providing ready-made goods and any sudden demand was exploited to bring about dramatic rises.

The Indian merchant lived in a keenly competitive world but he accepted important social limits to competition. He also accepted the importance of a way of living which did not allow him to develop impersonal forms of collaboration. Business was organized round the family with an occasional trading partner from the same social group. Thus the 'firm' of Mathurādās of Hugli at the turn of the eighteenth century included, besides Mathurā himself, his brother, two sons and two 'friends' Paran and Gosāinrām. Instances of Hindus and Muslims working together in close business relationships were known but unusual. The main tendency was to keep business confined within one's community for the reason that disputes arising in the course of business could be solved through social consensus. There was no impersonal law,

[1] Steensgaard [519], 42 f.; Marshall [408], 151–3.

efficiently administered, which would encourage merchants to seek a wider cooperation. In fact, cooperation in business was unpopular. The much-discussed joint-stock companies foisted upon the relatively weaker merchants of southern Coromandel by the English and the Dutch eventually proved unimportant. It did not catch on in Bengal where influential businessmen opposed it, and does not seem to have appeared anywhere else.

The structure of maritime trade which we have described above can be pieced together from the fragmentary documentation of the sixteenth century and the fuller evidence of the 200 years which followed. The historian's occupational hazard is to suspect basic changes occurring in the period he studies, but nothing in the evidence indicates any fundamental alterations in the structure during the years which separated Vasco da Gama and Ibn Mājid from Warren Hastings and Kantu Babu. This does not mean that changes which were not qualitative but nevertheless appeared spectacular to contemporaries, did not occur. In fact, the scene upon the Indian Ocean altered greatly during the sixteenth century by the establishment of formidable empires in its western regions, the development of the Portuguese maritime empire and by the virtual disappearance of the Ming imperial presence in the eastern seas.

The Osmanli Turks raced the Portuguese towards the Indian Ocean and Selim I overran Syria and Egypt in 1516–7. While it is true that the Turkish administration sat loosely upon the regional structure, which remained largely Mamlūk, the major result of this move for India's maritime trade was that the Turks in 1538 secured Aden at the mouth of the Red Sea. The Red Sea thus remained a Muslim lake throughout our period. Sulaimān the Magnificent, who followed Selīm I, consolidated Ottoman conquests in the lower reaches of the Tigris and the Euphrates with Basra at the head of the Persian Gulf falling to him in 1546. The occupation of this city as indeed the possession of Mesopotamia was disputed by the Ṣafavids of Persia who consolidated what became the national territory of Iran, beginning early in the sixteenth century under Shāh Ismā'īl (1487–1524). Somewhat later, the Mughal empire in India absorbed Gujarat (1573) and Bengal (1576). It was this almost simultaneous emergence of the Ottoman, Safavid and the Mughal empires in the western Indian Ocean which set a new scene for India's maritime trade.

Such major political changes, it must be assumed, had their effect on oceanic commerce, but it is not at all easy to say what it precisely was. In India the Mughals linked the eastern and western seaboard with the heartland of the sub-continent and provided further links for the overland trade to western and central Asia. Such connections had, of

course, existed earlier but doubtless the structure now performed with relatively higher efficiency. The Safavids similarly established a better-regulated hinterland for the Gulf ports and transport in Persia during the seventeenth century would seem to have been more efficient than in the neighbouring countries. The Safavids and the Mughals energetically encouraged the pilgrim traffic to the Islamic holy cities in Hijaz. And it seems likely that the Islamic peace of the period which the occasional Turco-Persian and Indo-Persian conflicts failed to disturb in a major way, and the relatively advanced administration which these three empires provided for the territories they controlled, promoted a new prosperity for the annual market at Mecca. To the considerable boost to maritime trade that the increasing importance of such an international market must have provided, we have to add the fact of the development of the trade in Yemeni coffee which occurred in the sixteenth century. Later evidence indicates that 'Turkish merchants' were the principal purchasers of coffee in Yemen and this pre-eminence was not challenged by the European buyers even at the height of the European coffee trade in the early eighteenth century. Merchants from Persia were second only to the merchants of the Ottoman empire in the coffee market, whereas the Indians bought much less. It seems, however, possible that the rush for Yemeni coffee was utilized by the Indians to good effect to push their trade in textiles. By the end of the sixteenth century the Red Sea had emerged as India's principal market overseas.

To some extent the emphasis upon the Red Sea was the result of the diversion of Indian shipping from Malacca. The decline of Indian voyages to Malacca was largely caused by the Portuguese occupation of the port in 1511. One other reason why Indian shipping should veer towards the west was the determined war the Portuguese waged against the influential Arab merchants of the western Indian Ocean among whom the Kārimī or their successors were pre-eminent. Observers like Duarte Barbosa commented specifically on the fall of the commerce of the 'foreign moors' at ports like Calicut in the early sixteenth century. Indian shipping which was giving up the Malacca voyage and found the Persian Gulf closed, may well have found the vacuum being created for them in the Red Sea much too tempting, especially as it coincided with the increasing importance of the *ḥajj* and the trade in Yemeni coffee. Whatever may have been the reasons, the importance of the Red Sea for India's maritime commerce remained a feature of the Indian Ocean trade throughout our period, only to be modified in favour of a renewed emphasis on the China trade around the middle of the eighteenth century.

Gujarati Muslim shipowners, vitally interested in preserving the freedom of high-seas navigation and retaining the hold they had on the

carrying trade in the middle Indian Ocean, were from the outset bitterly opposed to Portuguese penetration. It was they who organized the defence of Malacca against the Portuguese and, once Malacca fell, abandoned that port in favour of the north Sumatran principality of Achin and to a lesser extent for Bantam. Hindu merchants, on the other hand, who were less affected by considerations of freight trade, were less hostile and cooperated with the Portuguese authorities of Malacca as that entrepôt began to function once more. The carriage of spices in the Indian Ocean was from now on shared between the Gujaratis and the Portuguese. Achin in the reign of Sultan ʻAlāʼ al-Dīn Riʻāyat Shāh al-Qahhār (*c.* 1537–71) became a principal rendezvous for Gujarati shipping which successfully exploited the failure of the Portuguese to close the mouth of the Red Sea. After a dislocation during the first three decades of the sixteenth century the spice trade to the Red Sea revived significantly, and Charles Boxer is of the opinion that almost certainly more pepper was being carried by Gujarati ships from Achin to the Red Sea at the end of the sixteenth century than was being taken by the Portuguese round the Cape to Lisbon.[1]

Indian maritime trade was therefore little affected by the Portuguese impact, although the disruptions of the first three decades of the sixteenth century were vexatious enough. One of the reasons why the Portuguese themselves somewhat mended their ways was the reliance they began to place upon the customs from Indian shipping. Gujarati ships which were obliged to call at Diu and pay the Portuguese customs at that port enabled Goa to earn about a sixth of its entire revenues from the surplus of Diu at the turn of the seventeenth century. Similarly, Hormuz, which by an agreement of 1523 supplied the Portuguese with Rs. 90,000 a year, provided only a little more than a third of this amount if the Gujaratis did not come to trade there. At the other end, the Portuguese authorities of Malacca soon abandoned their anti-Islamic posture to lure the Muslim shipping back to that port.

Besides the concern for maritime customs, the Portuguese were inclined to cooperate with the Indians for the sake of their private commerce. We have already noticed the cooperation between the Hindu merchants and the Portuguese of Malacca, and the story was repeated elsewhere in the Indian Ocean. Thus Goa was dominated by Saraswat Brahmans and Baniyas from lower Gujarat, while Diu, which was the home of the Kapol Baniyas of Saurashtra, became an Indo-Portuguese entrepôt of importance. From the beginning of the sixteenth century, Portuguese officials traded on their private account and made free use of every official facility. They were soon joined by the resourceful

[1] Charles Boxer, 'A Note on Portuguese Reactions to the Revival of the Red Sea Spice Trade and the Rise of Atjeh, 1540–1600', *Journal of South East Asian History*, December 1969, pp. 415–28.

Jesuits, the more ubiquitous mestizos, and the deserters from the army. This unofficial Portuguese trade was financed, very largely, by the Indians, and the Portuguese flag often concealed Indian trade. As Boxer puts it: 'In the Portuguese ships plying the Indian Ocean interport trade the captain or the master was sometimes the only white man on board, for even the pilot and boatswain as well as the sailors were often Muslim Gujaratis.'[1] Moreover, trade with the Indian ports was important for the Portuguese establishments for their commerce with Europe. Thus, Goa traded to the value of Rs. 4 million a year with Gujarat around 1600 and the bulk of the goods thus acquired were dispatched to Europe. A substantial number of private Portuguese settled down at Cambay and many more called annually by way of trade. By the close of the sixteenth century the ramifications of this Indo-Portuguese commerce were wide and the hostility faced by the north Europeans in their bid to penetrate the Indian Ocean trade was in part due to the interests involved in the Indo-Portuguese network.

It is, however, important not to form an inflated idea of the dimensions of Portuguese trade in the India Ocean. Admittedly, in the absence of relevant statistics – especially if we keep in mind that official Portuguese trade formed only one of the three channels of commerce in the Indian Ocean and it is impossible to disentangle the Indian part from the Portuguese portion of the unofficial trade – we are in no position to form definitive ideas, but the impressions as summed up by Van Leur appear to be confirmed by the progress of research. 'In trade', Van Leur wrote, 'the belligerent activity of the Portuguese had become by the close of the 16th century one thread more in the fabric of the international exchange of goods carried on in those lands from Suez to Nagasaki...In quantity Portuguese trade was exceeded many times by the trade carried on by Chinese, Japanese, Siamese, Javanese, Indians from Coromandel, Gujarat and Malabar, and Arabs.'[2] And while we consider this verdict on Portuguese trade it is as well to add that, till well on into the eighteenth century the same was true of whatever European trade there was in the Indian Ocean. W. H. Moreland, who was considerably more European in outlook than Van Leur, noted: 'It is easy for a student of the contemporary records to form an exaggerated idea of the importance of the Dutch and English merchants in the India markets where they possessed a footing...but Indian markets were not dominated by the European trade...From time to time the European merchants dominated the markets for particular commodities, but it cannot be asserted that they ever dominated the commercial outlook.'[3] The mass of Indian trade

[1] Boxer [239], 57.
[2] Van Leur [393a], 164–5; Pearson [446] strongly reinforces this argument.
[3] Moreland [424], 152.

throughout the period we have in review appears to have been in Indian hands and remained confined to the Indian Ocean.

The main reason why the Indian merchant never conceded superiority in trade to the European, although the latter was better organized and better financed, was that he was the thriftier of the two. The Indian spent much less on equipping his ship and supporting his establishment, and he was content with much smaller profits. Besides, the Indian knew the ins and outs of the markets where he bought and sold his goods in a way the European could never match. There were 'little arrangements' at the customs house and local courts which always eluded the foreigner. And when everything seemed to fail before the European gun, there were local political strings to be pulled to set the Mughal on the adversary. The Indian merchant lost when the Mughal lost.

The force which the Portuguese employed was hurtful but ineffective. True, the port of Calicut, so closely watched from Goa, never recovered its earlier splendour, while in general the west coast of India remained quiescent before the impressive show of Portuguese strength and the Deccan ports were eclipsed. But in Coromandel there was little to restrain the Indian merchant and although the Portuguese did build Hugli to replace Satgaon in Bengal, local Muslim merchants quietly took the port over when the Mughals expelled the Portuguese in 1632.[1] Malacca and Hormuz both lost their former pre-eminence under the Portuguese administration, and in south-east Asia, trade was dispersed and shared as between the Portuguese and the Asians. Especially towards the end of the sixteenth century the Indian merchants found more and more openings as the Portuguese relaxed their controls. The efforts to enforce the official monopoly of the clove trade, for example, were abandoned, and when the Dutch admiral Steven van der Hagen captured Amboina in 1605, he found that the Portuguese allowed Muslim merchants from all over Asia to buy cloves in that island. At the other end of the Indian Ocean, Portuguese vigilance had never been strict at Hormuz because of the necessity to live in peace both with Safavid Persia as well as Ottoman Turkey which controlled the head of the Gulf. When Ralph Fitch visited the island in 1583 he found Hindu and Muslim merchants freely using the emporium while the trade in spices was openly conducted with no thought for the official monopoly.

During the sixteenth century, therefore, Indian maritime trade was redeployed partly because of the development of the Red Sea market and partly due to Portuguese interference. There was nothing in the seventeenth century to match the emergence of the great empires of the

[1] The Portuguese built a stronghold at Mylapore (San Thomé) and had a relatively weaker base at Negapatam. San Thomé flourished in the second half of the sixteenth century and may have contributed to the decline of Pulicat, which was really broken by the fall of Vijayanagar. Cf. Brennig [241], 11–12.

western Indian Ocean and the period from the point-of-view of Asian politics must be seen as a continuation of earlier trends. The Zaidī Imāms of Sana ended Turkish rule in Yemen in the 1620s and the Imām's port of Mocha definitely replaced Aden which had languished under Turkish maladministration. The international market of the *ḥajj* continued to be the principal draw for the trade in the Indian Ocean but complaints of tyranny and insecurity became more frequent than before. In the Persian Gulf the Ṣafavids expelled the Portuguese from Hormuz with the help of the English and trade veered to Bandar Abbas linking itself more closely than before with Persia itself. The rise of the Yarubis of Oman proved to be a singular misfortune for the Portuguese and introduced an eccentric element in the commerce of the Arabian Sea. Muscat fell to the Yarubis in 1650 and in the next fifteen years the Yarubi navy swept the Portuguese out of all their east African strongholds except Mozambique. Portuguese settlements in western India came under attack. Bombay was sacked twice in 1661 and 1662, as was Diu in 1668 and 1676, while Bassein was plundered in 1674. The uncertainty that these raids caused to Indian trade was reinforced by the fact that under Saif Ibn Sulṭān (*c.* 1692–1711), the Yarubi navy became virtually a powerful pirate force. Surat, which had built many of the Yarubi ships and continued to offer them maintenance, regretted its own liberality every year as the Muscat warships put in for trade, refit and riot at the Mughal port. Gujarati ships were often the target of Yarubi attack on the high seas. Insecurity at sea also continued to be acute at the other end where the Ming dynasty in China finally made way for the Manchus who found it necessary to interdict foreign trade in 1655 and follow it up by forcing the Chinese away from the coast in order to cope with Cheng Cheng-keng, master of Formosa and a partisan of the Mings.

Indian maritime trade was further rearranged during the seventeenth century not so much through the continuation of trends within Asia which had originated earlier, but by the emergence of the English and Dutch Companies in the Indian Ocean. The rearrangement, however, confirmed the tendency to emphasize western Asia at the expense of the south-east, which had marked Indian trade in the previous century. To begin with, the arrival of the north Europeans and the final breakdown of Portuguese restrictions liberated maritime trade in the Indian Ocean and caused prices to rise remarkably in several areas. For instance, it was estimated that pepper rose five times over its previous price when in 1599 the English appeared at Achin, the favoured Gujarati market.[1] But the initial buoyancy soon withered as the Dutch East India Company followed in the footsteps of the early Portuguese con-

[1] Kathirithamby-Wells [377], 453–79, especially 461.

quistadores, only with considerably greater efficiency and ruthlessness. The Dutch monopoly of the spice trade was real and nearly effective by the middle of the seventeenth century. The Banda islanders were exterminated in offering resistance to the imposition of the new restrictions and Javanese shipping virtually disappeared from Indonesian waters. Indian merchants felt the pressure keenly and although Coromandel merchants held on tenaciously at Achin, the Gujaratis appear to have given up the south-eastern voyages fairly early, not many going to Sumatra after 1618.[1]

The near-complete abandonment of Indonesian voyages left the Gujaratis with only the Red Sea market and the Gulf. This was the real reason why the English met with such fierce opposition when they attempted to cut in on the trade between Surat and Mocha in the 1620s. Moreover, the trade to the Red Sea came to be more and more in Indian textiles as spices were no longer obtainable. As the English factors at Surat put it: 'The merchants of this place are alsoe undone by our trade to the southwards (i.e. Achin, Bantam etc.) which hath taken (as wee may terme itt) the meats out of their mouthes and overthrowne their trade that way.'[2] Throughout the seventeenth century, however, Gujarati trade to the Red Sea continued in force and neither the English nor the Dutch affected the flow adversely. Because the conveyance of spice had stopped, the period may well be seen as the high tide of India's textile trade to western Asia. During the last three decades of the century, Gujarati shipping increased significantly and some trade to south-east Asia as well as China was resumed, Indian vessels venturing for the first time into the China Sea. Doubtless this is partly to be attributed to the liberal attitude of the Manchu dynasty once they felt free of any menace from the sea. In the 1690s Indian ships also appeared at Manila, although the number of such voyages was small, not more than one or two a year from Surat and a similar number from southern Coromandel.

In northern Coromandel the seventeenth century was similarly a period of commercial prosperity. Masulipatam's importance dates from the later sixteenth century when it emerged as the principal outlet of the recently consolidated Sultanate of Golconda. The city of Hyderabad, built in the 1590s, and the trade in diamonds which turned Golconda into 'the most important market for large diamonds in the world'[3] provided Masulipatam with fresh bases of prosperity. The fall of Portuguese Hormuz and the establishment of Bandar Abbas in the

[1] According to contemporary English evidence Gujarati trade to Achin stopped completely in 1615; there was a limited revival after 1618, but the traffic never regained its old footing. See Das Gupta [333], 442. For inter-Gujarat relations with Achin see: Gopal [324a], 59–61.

[2] Cited with comments by: Foster [31] (1618–21), xiii.

[3] Richards [467], 14–15.

1620s opened the Persian Gulf more effectively than before to the merchants of this Coromandel port. Added impetus to expansion was provided by the desolation of Gujarat by the famine of 1630–2. Mīr Jumla's impressive trade mainly directed towards the Persian Gulf in the 1640s and 1650s was based at Masulipatam. Petapoli (Nizampatam) near Masulipatam and to its south one other port were of some importance at the time. It is not clear how much importance should be given to Indian shipping of northern Coromandel, but the Dutch anxieties about the keen competition offered by the Indian merchants were real enough.

Through a curious historical coincidence both Masulipatam and Hugli were chosen as home ports by important communities of Shī'a businessmen. This meant a steady commercial contact with Persia and a reinforcement of India's general orientation towards west Asia at the time. But Gujarat's predominance in the Red Sea was not challenged and both Hugli and Masulipatam, besides Coromandel ports like Pulicat, Negapatam and Porto Novo as well as Hugli's neighbour Balasore, concentrated upon the trade of the Bay of Bengal. Ships from these ports maintained a steady intercourse with Pegu, Arakan, Tenasserim and Achin, while some trade with Macassar was done through the intermediary of Portuguese private traders. This division of the Indian Ocean as between the Indian ports, although a matter of emphasis, was an interesting feature which persisted later and with other merchants.

Taking one thing with another, it seems reasonable to hold that the later seventeenth century was the golden period of Indian maritime trade as well as the trade in textiles. But the prosperity proved to be remarkably short-lived. To a large extent the débâcle of Indian shipping during the early eighteenth century must be ascribed to the simultaneous political collapse in India and Persia, which was accompanied by the crippling civil war in Yemen as from the second decade of the eighteenth century. It is, however, important to remember that the decline of Indian shipping began much before the period of political unsettlement, as indeed is well demonstrated by data from the Dutch archives relating to the two ports of Hugli and Balasore.[1] Bengali shipping appears to have reached its high-water mark in the 1670s and fell away rapidly in the last two decades of the seventeenth century. Trade to Tenasserim and Achin in particular, which had been brisk, almost ceased at the turn of the eighteenth century. The reason for this remains obscure but it is worth noting that Mughal officials who invested largely in shipping in this area withdrew their investments during the period, while other merchants continued their lower-key commerce as before.

[1] Prakash [449].

Considerably more important than the decline of shipping in Bengal was the downfall of the great commercial marine of Gujarat in the early eighteenth century. Here again it is worth noting that the decline of Gujarat's maritime trade, although much hastened by the growing political insecurity, had begun before the breakdown of law and order really began to bite. At the turn of the eighteenth century, foreign observers repeatedly commented on the paradox that while Gujarati shipping was at its height, the increased volume of Gujarat's exports had glutted markets not only in the Red Sea but elsewhere in the Indian Ocean area. For several years between 1698 and 1710 the Gujaratis made unprofitable voyages which caused great concern. After that, anarchy in India disrupted Surat's hinterland while Gujarati merchants were mercilessly fleeced at Mocha to meet the costs of the Yemeni civil war. While Gujarat's trade contracted absolutely during the first half of the eighteenth century – with Surat's total turnover falling from about an annual Rs. 16 million to Rs. 5 million – the relative concentration upon the Red Sea was never given up by the Gujarati shipowners. As late as the middle of the eighteenth century English factors, who were by then politically powerful, still met determined resistance in their efforts to share the Red Sea trade.

The decline of the Mughal port of Surat and the disappearance of the fleet which was based at that port – the actual figures falling from 112 vessels in 1701 to about 20 in 1750 – were arguably the most important developments in the trade of the Indian Ocean during the period. To some extent the developing English trade, particularly the expanding English private trade, made up for the loss of Gujarati commerce, but at the time only a small proportion of the decline could be made up in this manner. Somewhat later, English trade based at Bombay and mainly directed towards China made a real difference in the overall picture of the Indian Ocean trade. Madras on the east coast had, however, definitely eclipsed Masulipatam and the southern ports before the close of our period,[1] and English private trade to Manila, concealed for the most part under Armenian names, had become an important silver-earner for India. The growth of Calcutta was, if anything, even more marked ever since John Surman obtained the privileges of duty-free trade for the private trader.[2]

[1] The eclipse of Masulipatam occurred early in the eighteenth century when the port was repeatedly attacked and on occasions cut off from the city of Hyderabad.

[2] Marshall [408].

CHAPTER XIV

TOWNS AND CITIES

1 Mughal India

It is hardly necessary to observe that the majority of the inhabitants of the Indian sub-continent during the sixteenth and seventeenth centuries passed their entire lives in a predominantly agrarian village-oriented environment, and that only a small minority were acquainted with urban patterns of living, however loosely the term 'urban' is applied. Yet regardless of the exact proportion (which can never be known), the urban population of Mughal India possessed an economic and cultural significance far exceeding its actual size. Under the Mughals, as under earlier régimes, but now with a greater degree of intensity, the cities and towns of the sub-continent fulfilled diverse and overlapping roles. The largest were thriving centres of manufacturing and marketing, banking and entrepreneurial activities, intersections in a network of communications by land and water which crossed and recrossed the sub-continent and extended far beyond, to south-east Asia, to the Middle East, to western Europe, and elsewhere. Similarly, in a contracted network of regional or sub-regional markets, smaller urban centres performed a more modest role in relation to local commerce, local resources and local consumer needs. Almost everywhere they went in the Mughal empire at its apogee under Jahāngīr and Shāhjahān keen-eyed European travellers noted the activity and prosperity of the urban centres, and especially those most heavily engaged in weaving and those ancillary crafts inseparable from the manufacture of textiles.

Yet their commercial and manufacturing roles alone do not account for the importance of the cities in the economic and cultural life of the period. A number of metropolitan cities derived their prosperity partly from their role as political centres and administrative headquarters, as capitals of the empire or at least temporary residences for a peripatetic court. And what Delhi or Agra were for the empire as a whole, Patna was for Bihar, or Burhanpur for Khandesh, the administrative focal point of a province or region. Then, again, other cities and towns had a sacral significance which complemented or transcended their economic or political importance, as was the case with Benares or Nasik, or on

a much smaller scale, Ajmer. Above all, whatever their individual characteristics, the cities and towns of the sub-continent served as the repositories of higher culture and learning, both as reservoirs in which were preserved the Sanskritic and Indo-Islamic 'Great Traditions' and as conduits through which those traditions could be transmitted to society as a whole.

It has been plausibly postulated that, at least for northern India, four distinct types of urban centres can be identified.[1] First, there were those cities whose prime function was administrative and where other roles, manufacturing or sacral, were of secondary importance to, and were partly dependent upon, the primary role. Of such a kind were Agra, Delhi, Lahore, and later, Hyderabad and Fyzabad. Secondly, there were those cities enjoying a predominantly commercial and manufacturing character, to which might have been attached administrative functions which, nevertheless, remained subordinate to their economic functions. Both Patna and Ahmadabad in the Mughal period fell into this category. Thirdly, there was the case of pilgrimage centres where trade and craft activities were drawn to where there was already a concentration of both permanently settled and transient population, as in the case of Benares or Mathura, both conveniently located in relation to the major river system of northern India. Finally, there were those centres which developed and flourished because of some distinct manufacturing technique, craft skill or local commodity which ensured their ongoing prosperity. Bayāna owed its prosperity to the indigo grown in the surrounding countryside. Khairabad and Daryabad in Awadh were famous for their textiles.

Hitherto, the urban history of the Mughal empire has not received the attention which it deserves, but the source material for future research is both extensive and varied. Inevitably, the historian is likely to lean heavily upon source material of European origin. Indigenous Indian sources tend to take the urban phenomenon for granted, and as being hardly worthy of notice. Contemporary European writers on India, on the other hand, despite their obvious limitations as foreigners, were generally concerned either directly or indirectly with commercial matters. If they were not merchants themselves, they frequently had business connections of various kinds, and they were naturally curious about anything and everything likely to affect trading conditions. Understandably, their preoccupations led them to observe more carefully conditions prevailing in the cities and towns – where commercial and manufacturing activities were mainly concentrated – than in the countryside, and in many instances they wrote from first-hand experience and sometimes after long residence in a particular region.

But regardless of the uneven quality of the sources available to the

[1] Naqvi [435], 269.

urban historian of Mughal India, what is most certainly lacking is demographic data or, indeed, statistical data of any kind. Instead, there are merely contemporary estimates based upon probably rather inadequate information provided by generally unknown informants. Precise figures are given very rarely. More commonly, it is a case of a simple assertion: that Lakhnawati (Gaur) in Bengal in the early sixteenth century possessed 40,000 hearths; that Agra and Fatehpur Sikri in the reign of Akbar were much larger than London; that Delhi in the reign of Shāhjahān seemed only slightly smaller than Paris, and that Agra was much larger than Delhi. Not much can be made of such statements. Nor, unfortunately, do the statistics given by Abu'l-Faẓl in the *Ā'īn-i Akbarī* with regard to the *ṣūbas* and *sarkārs* of Akbar's empire provide much assistance with regard to the actual size of individual cities and towns. Without statistics to support his case, the historian must nevertheless risk some general assertions, even if his evidence is bound to be circumstantial rather than statistically verifiable. The first point is that the period of the Mughal empire, or rather, of the sixteenth, seventeenth and part of the eighteenth century, appears to have been a veritable golden age of urbanization, at least for much of northern and central India. There was both an expansion in the size of pre-existing cities and towns and a proliferation of new foundations. Among the factors that contributed to this process must be mentioned the political circumstances favourable to expanding economic activity which resulted from the establishment of the *Pax Mughalica*, the expansion of both long-distance trade within India itself and of India's international trade with a network of Asian and European markets, and finally, in response to the latter, an enormous expansion of all aspects of textile manufacturing and marketing. The second point is that within a general framework of urban growth and urban prosperity, the rate of growth and the degree of prosperity cannot have been the same everywhere. Some centres prospered more than others; most conspicuously, those which could benefit from river communications and access to the new and important markets of the down-river and coastal ports which fed the insatiable European demand for Indian goods. Thus, the textile industries of both Patna and Benares benefited from the ease with which the products of those cities could be floated down the Ganges to the European factories at Hughli and, later, Calcutta, Chandernagore, and Chinsura. Other centres stagnated or declined. Jaunpur, it seems, never recovered its fifteenth-century prosperity after the loss of its position as the capital of the Sharqī sultanate, which followed the capture of the city by Sultan Bahlūl Lodī of Delhi in 1479.

In the area between the Panjab and Bihar there seems to have been a steady shift in the intensity of urbanization from west to east, perhaps

reflecting the situation throughout north India as a whole, during the Mughal period. It would perhaps be unwise to make too much of this. However, one may make four generalized observations: (1) the area between the Jumna and the Sutlej as well as the Jumna-Ganges Doab seems to have attained a high level of prosperity during the period of the early Delhi sultanate, as indicated by the assignment of *iqṭā's* in this area to pivotal political figures; (2) a similar concern with this area, and especially the Doab, is characteristic of the early Mughal period; (3) but during the seventeenth century the western and central parts of what is now Uttar Pradesh come into their own, as demonstrated by the fortunes of numerous towns and townships in this area which were either founded or enlarged at this time, often by direct government patronage. Finally (4), by the middle decades of the eighteenth century, while the western districts of Uttar Pradesh, and especially the Doab, were suffering from the effects of widespread political instability, the eastern districts of Uttar Pradesh, and especially in Awadh, were prospering, and this was manifested especially in the flourishing conditions of urban life.

In this context some reference must be made to the course of political events, for it is surely no coincidence that while both manufacturing and commercial life languished in the towns of the upper Gangetic and Jumna plains amid the upheavals of the eighteenth century, economic and urban life generally flourished in Awadh under the strong and benign rule of the Nawab-Vazirs. In urban history there is rarely any obvious correlation between the course of dynastic or military events and the factors which determine the rise and fall of urban economies and cultures: it is exceptional for a change of ruler, or even a decisive military engagement, to possess much long-range significance in the life of a city extending over many centuries. Yet it would be unwise to discount altogether such factors in the period under consideration. The decay of Jaunpur after 1479 and the effect of the strong rule of the Nawāb-Wazīrs on the urban life of eighteenth century Awadh have already been mentioned, and other examples could be added. Shivājī's sack of Surat in 1664, and again in 1670, marked the beginning of the decline of what had formerly been the greatest port of the Mughal empire, and it would be unrealistic to suppose that the inhabitants of Delhi in 1398, 1739, 1757 and 1857 were not affected, economically and in other ways too, by the depredations of the occupying armies.

Obviously, centres of commerce and manufacturing possessed a *raison d'être* far transcending short-lived political upheavals and revolutions, yet just because most Indian urban centres depended for their prosperity upon political conditions favourable to the steady pursuit of their particular trades and specialized craft industries, they could be

disastrously affected by a climate of political instability, especially if that instability threatened to become prolonged or to spread itself over an extensive area. The flowering of an urban-based economy and of urban culture during the reigns of Akbar, Jahāngīr, and Shāhjahān, and for much of the reign of Aurangzeb, derived largely from the establishment of political conditions highly advantageous to commerce and to the trading and artisan classes of the cities. Similarly, the spread of political instability over much of northern India during the eighteenth century led inevitably to a contraction of urban prosperity over large areas of the Panjab, Rajasthan, the Jumna-Ganges Doab and of the country between the Chambal and the Narbada. Wherever that instability could be held at bay – in Awadh, for example, or in the 'new' Maratha capitals, Poona, Nagpur, Baroda, etc. – urban life continued to flourish. Most strikingly it was in the port cities under the control of foreigners and relatively immune to the disorders consequent upon Mughal political decline (i.e. in Calcutta, Madras, Pondicherry and Bombay), where urban growth in the eighteenth century was most conspicuous.

Considering the enormous diversity of urban economies and urban cultures spanning the sub-continent, it would be impossible to speak of a 'typical' Indian city of this period. Between a Hindu sacral centre, such as Benares or Ujjain, and the administrative headquarters of the imperial government, such as Agra or Lahore, the differences were apparent enough, but there were also profound differences between a northern city – such as Benares which, despite its sacral character, was also a major manufacturing and commercial centre – and the great religious centres of the south, such as Conjeeveram, Chidambaram or Tanjore. Similarly, there were obvious differences between the latter and the trading ports of the Malabar Coast such as Cochin or Calicut. In this sense, the Muslim capitals of the south – Bijapur, Golconda, Ahmadnagar and, later, Hyderabad – bore a closer resemblance to their northern counterparts than did the Hindu cities of the south to those of the north. It would be as imprudent to seek for a model Hindu city as it would for a model Indo-Islamic one.

Although some of the most flourishing cities of sixteenth and seventeenth-century India were unmistakably centres of Muslim political and cultural hegemony, the pluralist nature of Indian society, and the fact that almost everywhere the Muslims were a minority community, makes it difficult to regard even such metropolitan centres as Delhi or Ahmadabad as being truly 'Islamic' in form and function in the way that contemporary Herat or Bukhara were. It is unlikely that the Muslim inhabitants of, say, Delhi or Lahore in the seventeenth century, or even of Lucknow in the late eighteenth century constituted more than a minority of their total populations. Nevertheless, a Muslim urban

component expressed in terms of both form and function was a factor to be reckoned with in some of the largest and most prosperous cities of the north – Lahore, Delhi and Agra, Allahabad and Patna, Lakhnawati and Sonargaon, Ahmadabad and Cambay, Broach and Surat, to name only obvious examples – and in many cases this component long pre-dated the coming of the Mughals. Evidence of at least the partially Islamic character of such cities was provided most conspicuously by their physical appearance, their layout, and the allocation and distribution of non-residential space. More specifically, such cities included some or all of the following features: strongly defended palace-forts which served as the focal points for imperial control and regional administration, often located close to a river for greater security as much as for comfort, and frequently incorporating in their design features of military architecture of non-Indian origin; open areas (*maydāns*) for military parades and equestrian exercises (*furūsiyya*), also characteristic of Middle Eastern cities such as Cairo and Isfahan; Muslim religious structures – mosques, colleges and tombs – as well as purely secular structures such as bazaars and caravanserais built in architectural styles derived in large measure from Iran or Turkistan; and massive walls and gateways (in contrast to some of the overwhelmingly Hindu cities, which were unfortified) which served to protect both the governmental authorities and the city itself from local *émeutes* and rebellions, as well as from enemy invasion. Not all such characteristics were present to the same degree: climate, topography and the extent to which a particular city had been exposed to Islamic cultural influences were all modifying factors. So, too, were local traditions of architecture. In Bengal and Gujarat, for example, the traditional architectural styles of those regions gave even public buildings erected by the command of Muslim rulers a more truly indigenous character than those in the north-west, where Iranian and Turkistani cultural influences were stronger.

Despite the prevalence of impressive fortifications, such as those which Shāhjahān threw up around his new foundation of Shahjahanabad, the larger Indian cities of this period of urban prosperity and expansion, tended to outgrow their walls. Thus John Jourdain could write of Agra at the beginning of the seventeenth century: 'The cittie is 12 cosses longe by the river side, which is above 16 miles; and at the narrowest place yt is three miles broade. It is walled, but the suburbs are joyned to the walls, that were it not for the gates you could not knowe when you weare within the walls or without.'[1]

Agra was no special case. Other cities had a similar 'urban sprawl' extending beyond their moats or ramparts, and there was also a tendency for a ring of encircling surburbs to envelop what had once

[1] Jourdain [86], 163–4.

been the original foundation and which had now become the inner town. Such suburbs usually grew up around particular focal points: a local shrine or a cluster of noblemen's houses and gardens. In some of the major cities of the empire – in Agra and Shahjahanabad, for example – it was customary for the princes and nobles to construct residences and gardens outside the walls and, wherever possible, along the banks of the Jumna. Traces of this development have, for the most part, long since disappeared, although the location of the surviving ruins of the Qudsiya Bagh, just north of the Kashmir gate of Shahjahanabad, testifies to the continuity of the practice well into the eighteenth century. Another way in which a suburb sometimes came into being was as the permanent encampment of a great *manṣabdār*, as in the case of Jaisinghpura and Jaswantpura outside the walls of Shahjahanabad, areas originally marked out as the camp-sites of Maharaja Jai Singh of Amber and Jaswant Singh of Marwar. A common way for a suburb to grow up was around a sacral site, Hindu or Muslim, which provided a nucleus for continuing growth. In the case of the Delhi area, this had happened earlier with the villages of Chiragh-Delhi and Nizamuddin, and at Qadam-Sharif, beyond the Lahore and Ajmer gates of Shahjahanabad. Occasionally, as in the case of Ahmadnagar during the reign of Aurangzeb,[1] a major city would be completely unwalled, although there is a presumption in such cases of an adjacent fort of considerable strength.

Significantly, European travellers in Mughal India seem to have been far from impressed by the appearance of even the major centres of population, and often commented unfavourably on the apparent lack of planning, the low standards of housing, the general lack of amenities, and the striking contrast between the affluence of the ruling élite and the squalor which seemed to characterize the daily life of the mass of the population. Sir Thomas Roe was typical, in writing of the road between Surat and Burhanpur: '...the townes and villages are built of Mudd, soe that there is not a house for a man to rest in...'.[2] So was Tavernier, writing of Agra: 'The houses of the nobles are beautiful and well built, but those of private persons have nothing fine about them, no more than all the other towns of India.'[3] Bijapur was described as not having '10 houses that are worthwhile, nor good streets, nor planning. Many people live in small tents, torn and old...'.[4]

Notwithstanding these critical impressions of city life, the *Pax*

[1] Sāqī Masta'id Khan [164], 157.

[2] Roe [87], 1, 89. Of Burhanpur itself, Roe wrote ([87] ibid, 1, 91): 'The whole Citty (which is veary great) being all builte of Mudd baser than any cottage, except the Princes howse, the Chan Channas [the Khān i Khānān's], and some few others.'

[3] Tavernier [104] (2), 1, 105.

[4] Correia-Alfonso, 'Bijapur Four Centuries Ago as Described in a Contemporary Letter', *Indica*, 1.1: 86 (March 1964).

Mughalica contributed in a number of ways to the accelerated pace of urbanization during the sixteenth and seventeenth centuries, especially in the north. The political unification of so vast an area under a single ruler inevitably stimulated commercial and therefore urban life, not least by removing obstacles to the movement of goods and peoples across the frontiers of what had formerly been rival and often warring states. The Mughal rulers and high-ranking provincial officials, despite or perhaps because of their personal involvement in trading activities (including sporadic attempts at establishing monopolies), seem to have recognized the advantages to be gained from supporting mercantile activities and the merchant classes in general. In part, at least, this accounts for Sher Shāh's concern to improve the conditions of travel on the roads of his empire, and Akbar's attempts to standardize weights, measures and currency. The great expansion of commerce during the Mughal period – to be seen most conspicuously in the manufacturing and marketing of textiles to meet both an internal and an external demand – inevitably brought increased wealth to the major urban centres of the country, and especially to those cities whose location made them natural entrepôts whether by land or sea. The ports of Surat, Broach and Cambay on the west coast, and Masulipatam on the east, as well as Patna and Benares on the Ganges, now entered upon the period of their greatest prosperity. There must also have been a substantial growth in the urban population, partly as a result of an inexorable drift from the countryside into the towns, such as was clearly discernible to some contemporary observers. The reasons for this were not the same everywhere or at all times, but the need for manpower to meet the imperative demands of the textile industry was certainly the commonest, while, as Bernier commented: '...many of the peasantry, driven to despair by so execrable a tyranny [i.e. the rigour with which the land revenue was collected], abandon the country and seek a more tolerable mode of existence, either in the towns, or camps'.[1]

It seems safe to state as a generalization that virtually all the larger towns and cities grew in this period, and not merely those, like Agra, Delhi, Lahore and Aurangabad, which served for extended periods as imperial residences. Former capitals of independent sultanates, such as Ahmadabad and Golconda/Hyderabad, retained their importance as regional centres since, in effect, every *ṣūba* headquarters functioned as a regional capital, servicing the *ṣūbadār's* court and administration, attracting entrepreneurs to exploit its commercial potential, and acting as a magnet for local political and cultural life. The same was true, *mutatis mutandis*, of the *sarkār* headquarters where, yet again, an established administrative framework, the presence of the *faujdār* and

[1] Bernier [102], 205.

his staff, and the comings and goings of officials in a town which must have already enjoyed enough importance to be selected as a *sarkār* headquarters in the first place, were bound to promote further commercial activity. Similarly, the *qaṣbas* or townships, of which in Akbar's time there were said to be 3,200,[1] also seem to have grown in this period, and for much the same reason as the larger towns and cities. Moreover, it has been postulated very convincingly that the attempts made by the Mughal government, especially under Akbar, to substitute cash payment of the land revenue for payments in kind, must have greatly stimulated the growth of the *qaṣbas*, at least in the core provinces of the empire, where perhaps alone such a policy was enforceable.[2] Already in the sixteenth century there were overgrown villages and burgeoning townships serving as granaries for the storage of government grain paid as revenue, as grain-distribution centres, and as collection points for the *Banjāras*, a nomadic caste specializing in the transport of grain. In course of time, such focal points of localized economic activity acquired additional importance as a result of the government's insistence that the land revenue be paid in cash and not in kind, which meant that the cultivator had to secure a market for his crop before he could meet the revenue demand. This stimulated increased marketing activity in the townships as well as the establishment there of traders whose function was to purchase the surplus crop from the villagers in the surrounding countryside. In addition, there would be drawn to these expanding communities moneylenders and *ṣarrāfs*, who would also be involved in such transactions, as well as petty landholders, *jāgīrdārī* agents and the beneficiaries of *waqfs* or assignments of one kind or another. Furthermore, the distribution by the government of various *in'ām*, *waqf* and *madad-i ma'āsh* grants to members of the *ulamā* meant that, at least so far as *qaṣbas* with Muslim inhabitants were concerned, the new townships often included religious personages whose presence stabilized the relationships between newly established groups and classes. If this thesis holds good, it would appear that the last decades of the sixteenth century and the first decades of the seventeenth saw the steady rise of perhaps hundreds of such 'nuclear' urban centres over much of northern India.

As for the deliberate foundation of new settlements and the no less deliberate resuscitation of dying ones, this appears to have been a recurring feature of the Mughal period.[3] Indeed, in some areas, and

[1] Niẓāmu'ddīn Aḥmad [149], III, 545–6. [2] Chandra [261], 321–31.

[3] A typical case would be that of Aurangzeb, travelling through Karad *pargana* (south of Satara) in 1699 and finding a *thāna* (police post) which had been destroyed by the Marathas, a derelict mosque, and the local inhabitants fled. He gave orders for the *thāna* to be rebuilt and the place repopulated. Assurances of safety were given to the runaway peasants and a guard was left behind to protect them. See: Sāqī Musta'id Khān [164], 249.

perhaps most conspicuously in certain districts of Uttar Pradesh, this trend continued unabated into the eighteenth century. Generally, the task seems to have been undertaken by a figure of local prominence or a *jāgīrdār* with an interest in developing the economic potential of the area in which his *jāgīr* was located. Thus in the case of Shahjahanpur, the initial foundation came about as a consequence of Shāhjahān's favour towards two Afghan brothers, Dilīr Khān and Bahādur Khān, holders of *jāgīrs* in Kanauj and Kalpi. To Dilīr Khan, who also founded Shahabad in Hardoi district, Shāhjahān granted fourteen villages in what is now Shahjahanpur district and ordered him to build a fort there. The fort, when built, and the two *mahallas* of Dilirganj and Bahadurganj then formed the nucleus of the future town of Shahjahanpur, which was partly settled by Afghans brought from beyond the Indus by Bahādur Khān after one of his campaigns, the immigrants being relocated in *mahallas* according to tribal and clan affilitations.[1] This was a normative pattern for the resettlement of villagers in urban communities in the Middle East.[2] Comparable examples of urban foundations from the same reign are Muzaffarnagar, founded by Muẓaffar Khān-i Khānān around 1633, and Muradabad, founded by Rustam Khān Deccani and named after Prince Murād Bakhsh. Among instances dating from a later period are Farrukhabad, founded by Muḥammad Khān Bangash and named in honour of Farrukhsiyar: Ghaziabad founded by Ghāzī al-Dīn 'Imād al-Mulk; Najībābād, founded by Najīb al-Dawla around 1755; Fyzabad, which owed its rapid growth and prosperity to the patronage of Safdar Jang and Shujā' al-Dawla; and Rampur, founded in 1775 by Faiẓullah Khān.

It would seem that the creation of new settlements was a relatively straightforward business, needing no more than a local *ẓamīndār* or a *jāgīrdār* willing to make an investment which might take the form of providing a town wall and gateways, a *sarāi* or two, a place of worship or, when necessary, a regular supply of water. Typical of a very modest foundation of this kind was that of Ekdil in Etawah district, traditionally said to have been founded by Saksena Kāyasths and known originally as Sarāi Rūpa. During the reign of Shāhjahān the land around the township was assigned to a court eunuch, Yakdil Khān, who first built a *sarāi* there in 1629–30 and then a small mosque in 1632, the township thereafter being known as Yakdilabad.[3] Presumably in all such cases prior government approval was required but this must have been almost automatically given. Indeed, the initiative must have often come from above, as in the case of Shahjahanpur. The other essential element in

[1] Neville [441] (1910), XVII, 135–7.
[2] For Damascus and Aleppo in the Mamlūk period, see: Lapidus [392], 196–9.
[3] Bukhārī [50], 44–6.

the establishment of a new foundation was people, and in most cases there is little or no evidence as to where the immigrants came from. Some may have been forcibly transferred from another part of the country, and this would have frequently been the case at the conclusion of a successful campaign or the suppression of an internal revolt. The granting of favourable terms to immigrants during the initial years of settlement must have encouraged some movement of people, reinforced by the trend (already alluded to) for population to drift away from the countryside and into the towns. In Uttar Pradesh, there was a long-established tradition of recruiting immigrants from beyond the Indus, as happened in the case of the Afghans brought to Shahjahanpur by Bahādur Khān, and in the case of their fellow-countrymen brought to Farrukhabad by Muḥammad Khān Bangash. An inscription from Burhanpur records how a certain Ḥājjī Ṣadr Shāh came from Bukhara to the Delhi region during the reign of Aurangzeb and populated with his followers the two villages of Sadrpur and Shahpur in Shakarpur *pargana*, in the vicinity of Shahjahanabad.[1] This must have been a recurring pattern until well into the eighteenth century, as happened in the case of the settlement of Rohilkhand.

The pre-Mughal Muslim dynasties in India frequently adapted to their requirements old-established Hindu settlements, as was the case with Delhi, Lakhnawati, Mandu, Bidar and Bijapur. More rarely, a sultan laid out a completely new city, as happened at Ahmadabad. For the most part, the Mughals were content to follow their predecessors' example and consolidate their power from such traditional metropolitan centres as Delhi, Lahore and Agra, although both Akbar and Shāhjahān embarked upon costly and high distinctive exercises in city planning at Fatehpur-Sikri, and Shahjahanabad respectively. A contemporary parallel to Akbar's activities at Fatehpur-Sikri, but beyond the territorial frontiers of the Mughal empire, was Muḥammad-Qulī Quṭb-Shāh's foundation of Hyderabad, which exemplified contemporary urban planning at its most enlightened. Hyderabad came into being not in response to royal caprice but to meet a specific need. By the final quarter of the sixteenth century, Golconda itself had grown in population to a point where the city had become unbearably congested, while the unsuitability of the ground lying immediately beyond the walls made further outward expansion impractical. The choice of the site for a sister-city may have been partly determined by the location of a bridge built across the Musi as early as 1578 by Ibrāhīm-Qulī, the previous ruler. But whatever the reason for the choice of site, from about 1591 onwards the new city began to take shape, with priority being given to public buildings – the Charminar, completed in 1592; the hospital (Dār

[1] Rahim [48], 77–9.

al-Shifā') in 1595; and the Jāmi' Masjid in 1597.[1] The growth in population of the new foundation and its development as a commercial entrepôt proved exceptionally rapid, and from the first decade of the seventeenth century, Hyderabad and Golconda were coupled as twin metropolitan centres in much the same way that Hyderabad and Secunderabad were to become under the Nizams.

No such practical considerations as led to the foundation of Hyderabad seem to have contributed to the founding of Fatehpur Sikri or Shahjahanabad. In the case of Fatehpur Sikri, it would seem likely that this colossal undertaking was primarily conceived with a view to the apotheosis of Timurid kingship, now evolving for the first time in India as the embodiment of a vision of universal monarchy, in contrast to the rather unstable traditions of central Asian tribal leadership exemplified by the fortunes of Akbar's father and grandfather. Possibly, Fatehpur Sikri was also conceived in symbolic terms as a kind of microcosm of the empire, an *imago mundi* in the manner of al-Manṣūr's round city.[2] Like Ahmadabad, which had acquired a sacral significance with the participation of Shaykh Aḥmad Khattū and other renowned *shaykhs* in its foundation, Fatehpur Sikri derived a distinctive sanctity from the *baraka* (literally 'beneficent spiritual power') of Shaykh Salīm Chishtī, whose cell was close by, and whose tomb would eventually be situated within the courtyard of the Jami' Masjid itself.[3] In the case of Shahjahanabad, Shāhjahān does not appear to have been especially concerned to associate any outstanding religious figures with its foundation (although it should be noted in passing that the architect of the Jāmi' Masjid belonged to the family of Shāh Kalīm Allāh Shāhjahānābādī, who during the second half of the seventeenth century would take the lead in the revitalization of the Niẓāmiyya branch of the Chishtiyya *silsila*). Perhaps it was felt that the general setting was already endowed with sufficient *baraka* from the proximity of the shrines at Qadam-Sharif, Nizamuddin, Chiragh-Delhi, Mehrauli and elsewhere.

In planning a new metropolis, Shāhjahān was surely following the example of his grandfather in wanting to build a city which would be tangible evidence of the wealth and splendour of the empire and its ruler. In addition, he may also have aimed at outshining the lavish building programme initiated by Shah 'Abbās I at Isfahan in the first quarter of the century, of which the Mughal court must have been only too

[1] For a detailed account of the building of Hyderabad, see: Sherwani [497], 12–32 and 135–46.

[2] Wendell [542], 99–128.

[3] For the foundation of Ahmadabad, see *Mir'āt-i Aḥmadī* [167], (supplement) 2–3. For the background to the founding of Fatehpur Sikri, see Smith [515a], 104–9; and 'Fatḥpūr-Sīkrī', *Encyclopaedia of Islam* [294], II, 840. Rather surprisingly, the close association of Akbar's grandfather, Bābur, with Sikri, and its proximity to the battlefield of Khanua (1527), have tended to be overlooked. See: Bābur [168], II, 548–9, 581, 588 and 615–16; Husain [47], 49–66.

well aware as a consequence of the comings and going of diplomatic missions between the two empires. If so, it is not too fanciful to imagine that Chāndnī Chowk was planned to rival the Chahār-Bagh in Isfahan, and the Shajahanabad Jāmi' Masjid to dwarf the Ṣafavid Masjid-i Shāh. By choosing the general Delhi area for the location of his new capital Shāhjahān can hardly have overlooked the fact that he was returning to a setting associated with three centuries of imperial grandeur under the Delhi sultans. Yet in choosing a final site he was careful to place some distance between the new city and the various older settlements stretching as far south as Mehrauli. Shahjahanabad was eventually located some distance from Sher Shāh's city, which lay to the north of the Purana-Qila (where Humāyūn and, for a time, Akbar had resided), and was also quite distinct from what remained of Fīrūz Shāh Tughluq's Firuzabad (to which the name Delhi was then given), which was separated from Shahjahanabad by the line of the latter's ramparts stretching from the Ajmer gate to the river. Tavernier's account of the middle years of the seventeenth century makes it clear that the two cities of Shahjahanabad and Delhi were adjacent but separate from each other:

Delhi [i.e. Firuzabad, with its focal-point at Kotla Firuz Shah] is a large town...

Since Shah Jahan has caused the new town of Jahanabad to be built, to which he had given his name, and where he preferred to reside rather than at Agra, because the climate is more temperate, Delhi has become much broken down and is nearly all in ruins, only sufficient of it remaining standing to afford a habitation to the poor. There are narrow streets and houses of bamboo as in all India, and there are but three or four nobles of the court who reside at Delhi, in great enclosures, in which they have their tents pitched...

Jahanabad, like Delhi, is a great straggling town, and a simple wall separates them. All the houses of private persons are large enclosures, in the middle of which is the dwelling, so that no one can approach the place where the women are shut up. The greater part of the nobles do not live in the town, but have their houses outside, so as to be near the water.[1]

Reference to Mughal capitals calls for some explanation. Prior to the eighteenth century it cannot be truly said that there was a single city in the Mughal empire which possessed the unique metropolitan attributes of, say, contemporary Paris or London in relation to the kingdoms of France or England. The centre of government was wherever the Padshah was to be found at any given time so that, in practice, it was often the imperial camp (*urdū-i mu'allā*) which was the *de facto* capital of the empire, and such cities as Agra, Delhi or Lahore only truly possessed that status when the Padshah was residing within their walls. The *urdū-i mu'allā* itself seem to have been little short of a city in motion. Thus Bernier observed:

[1] Tavernier [104] (2), I, 96–7.

Many are of opinion that the camp contains between three and four hundred thousand persons; some believe this estimate to be too small, while others consider it rather exaggerated...

All I can confidently assert is that the multitude is prodigious and almost incredible. The whole population of *Delhi*, the capital city, is in fact collected in the camp, because deriving its employment and maintenance from the court and army, it has no alternative but to follow them in their march or to perish from want during their absence.[1]

If Bernier was correct, it is not difficult to imagine what an effect Aurangzeb's march southwards in 1681 must have had upon the population of Shahjahanabad, itself not thirty-five years old as a foundation. It was not until after Bahādur Shāh I's death in 1712 that the later Tīmūrids became more or less permanently sequestered in Delhi, as Shahjahanabad soon came to be called. Before that time, however, it was largely a question of an individual ruler's personal preference as to which city acquired the status of a temporary capital, although with Agra generally holding pride of place. During the reigns of Bābur and Humāyūn, and during most of the reign of Akbar, Agra was the favoured residence, apart from during the Sūr interregnum, which significantly saw Delhi restored to its former pre-eminence, and during the middle years of Akbar's reign, when Agra shared the primacy with Fatehpur Sikri. Under Jahāngīr, Agra continued to hold its own, despite the emperor's personal fondness for Lahore, and this was true also for the first two decades of Shāhjahān's regin. There followed the decision to build a new metropolis, Shahjahanabad, which had the inevitable consequence of down-grading Agra, although the latter's fort continued to be used as a repository for at least part of the imperial treasury until as late as 1719, when the Sayyid brothers captured the city. During the early years of his reign Aurangzeb seems to have preferred Shahjahanabad to Agra, a preference reinforced, no doubt, by the fact that, down to 1666, Shāhjahān was still alive, a captive in the Agra fort. After 1681, Aurangabad in the Deccan became the operational headquarters of the imperial government, and it retained this function until Bahādur Shāh left the Deccan in 1710. From 1712 onwards, possession of Delhi became almost a *sine qua non* for any Tīmūrid who aspired even to titular sovereignty.

The relations between the urban population and the Mughal state were determined in large measure by the fact that the traditional Indo-Muslim city, like the traditional Islamic city in north Africa and the Middle East, lacked any kind of corporate or municipal institutions.[2]

[1] Bernier [102], 381. Interestingly, this was still true of Tehran in the first decades of the nineteenth century, when the shah and his camp withdrew to Sultaniyeh to escape the summer heat.

[2] Stern [523], 25-50.

From the point of view of the government, cities and towns were no more than conglomerations of adjacent villages, which indeed was frequently the case when outlying villages were absorbed into the expanding suburbs of a pre-existing settlement. They possessed no rights, exemptions or charters and had no distinct legal personality, thus standing in marked contrast to the cities of late medieval or early modern Europe. But because Indo-Muslim governments concerned themselves with little beyond the levying of taxes, the maintenance of internal security, and a few additional functions such as the regulation of the markets and, in some instances, the provision of a water supply, most urban communities in Mughal India were largely self-regulating, if not self-governing.[1] To write of the cities of Mughal India as being for the most part self-regulating may be to overstate the case. It would perhaps be more accurate to attribute a self-regulatory role to the wards or quarters (*maḥal*, *maḥalla*) into which every city or town was subdivided. In many instances the *maḥalla* possessed its own organic identity, which could be defined in terms of economic organization or occupation, a common caste or sectarian affiliation, a shared ancestral migration from a particular village or region, a client-patron relationship with a particular family under whose protection that *maḥalla* lived, or allegiance to a saint whose shrine was located within the vicinity. If not wholly self-sufficient, many *maḥallas* would be able to provide at least some of the basic needs of their inhabitants, while their sense of group identity, and what distinguished them from the residents of other *maḥallas*, was reinforced in many cases by the fact that the *maḥalla* was walled off from its neighbours, with gates which could be closed at night or during periods of disorder and insecurity. Within each quarter, most matters of concern to the community as a whole could be settled by the arbitration of a *panchāyat* or a respected 'elder'. Appeals beyond the bounds of the *maḥalla* to a representative of the imperial government (such as the *qāẓī* or the *kōtwāl*), although sometimes unavoidable, were probably only resorted to on rare occasions. Such appeals could be unpredictable in their outcome, and likely to prove costly, even dangerous.

Because the Indo-Muslim state did not recognize the city as possessing a distinct corporate character, there did not exist any mechanism through which the state dealt with the cities at a high level, except through the provincial officials (*ṣūbadārs*, *faujdārs*, etc.) whose charges were delineated territorially in terms of an entire *ṣūba* or *sarkār*. The

[1] It should be stressed that charitable undertakings sponsored by rulers, high officials or members of the ruling elite, which were of direct benefit to the urban population, such as the construction of mosques, colleges, *sarāis*, wells, etc., were acts of personal piety, not routine functions of government.

Mughals did not appoint city governors as such, although *qil'adārs* were appointed to the command of strategically important fortresses. Some fortresses were adjacent to towns of some importance in their own right, but the duties of the *qil'adār* did not normally extend beyond the fortress walls. Special arrangements were also made in the case of certain of the west coast ports, so valuable in terms of their revenue yield but with an administration made more complex by the presence of an exceptionally diverse population, including foreign merchants. Thus the *mutaṣaddīs* for Surat and Cambay combined the functions of both *faujdār* and *kōtwāl*, and may be regarded as being city governors of a type not to be met with elsewhere in the empire. In the case of the *mutaṣaddī* of Surat, he was frequently responsible for the administration of the entire Surat *sarkār*, and also for the port of Broach. In Cambay, too, the offices of *mutaṣaddī* and *faujdār* were held by one person.[1]

Apart from the *qāẓī*, whose diverse range of duties derived from his function of enforcing the *sharī'a*,[2] and the *muḥtasib* whose responsibility for ensuring the moral well-being of his charges made him, in effect, both an inspector of markets and a censor of morals,[3] the only official appointed by the government to make its will felt specifically in the towns and cities was the *kōtwāl*, or prefect of police, whose office dated back to the early years of the Delhi sultanate. The appointment was an important one at a local level – it is significant that during the reign of Aurangzeb the *kōtwāl* was in many instances personally appointed by the emperor[4] – and at least so far as the urban population was concerned, it was upon his zeal and integrity that the safety of life and property rested. To maintain his authority, he had a staff of underlings (*maḥaldārs*) and a substantial body of armed retainers – Manucci mentions a horseman and twenty to thirty foot soldiers for each *maḥal* – and, when necessary, he could call upon the *ṣūbadār* for assistance.

In general, his duties consisted of the enforcement of law and order, the apprehension and punishment of criminals, the assessment and collection of taxes within the city proper, the enforcement of regulations governing the operation of the city's markets, and keeping a watch over the moral welfare of the community within his charge.[5] Unquestionably, there were aspects of his duties which overlapped with those traditionally performed by the *muḥtasib*, but that office had never functioned in the

[1] *Mir'āt-i Aḥmadī* [167] (supplement), 166, 175, 187.

[2] See: Siddiqi [504a], 240–59; 'kādī', *Encyclopaedia of Islam* [294] (1960), IV, 373–5.

[3] Siddiqi [503], 113–19; Ansari [214], III, 491–3.

[4] *Mir'āt-i Aḥmadī* [167], (supplement), 153.

[5] For extended accounts of the *kōtwāl's* duties see: Abū'l Faẓl [123], II, 43–5; *Mir'āt-i Aḥmadī* [167], 144–6; Manucci [110], II, 420–1; Sen, ed. [109], 27–9. Sir Jadunath Sarkar regarded Abū'l Faẓl's account of the *kōtwāl's* duties as constituting the ideal rather than the reality of the office, but there is no lack of evidence in the chronicles, and also in surviving inscriptions, to indicate the wide range of his duties. See: Sarkar [474], 57–61, 214–15; Saran [470], 214–18. '*Kōtwāl*', *Encyclopaedia of Islam* [294].

cities of India in quite the way it had in the cities of Iran or Iraq, due largely to the fact that the Muslim population of the former was generally in a minority. In any case, the competing roles of *kōtwāl* and *muḥtasib*, of executive authority and the *sharīʿa*, were hardly unique to the city life of Mughal India. In Abbasid and Seljuq times there had been a similar confusion over the functions of the *ṣāḥib al-shurṭa* and the *muḥtasib*, as also in the contemporary Ṣafavid monarchy between the *kalāntar* (later, the *dārūgha*) appointed by the shah, and the *muḥtasib*.[1] In the Mughal empire this confusion may have been more pronounced after 1659, when Aurangzeb revived the virtually defunct office of *muḥtasib*.[2]

Among the specific duties attached to the *kōtwāl's* office were some which were distinctly concerned with the acquisition of information and domestic espionage, while as a law enforcement officer, he was required to ferret out and apprehend criminals,[3] to patrol the streets, to ensure that the city gates were closed at night, and to see that a watch was set. It was his responsibility to see that the walls and gateways were kept in a proper state of repair to prevent illegal entry or exit.[4]

According to Manucci, the *kōtwāl* was responsible for the collection of various taxes and cesses, and it was presumably for this reason that his instructions included observing the spending habits and knowing the income of everyone in the town. This was done by the appointment of a *mir-i maḥāl* in each quarter (presumably equivalent to the *kadkhudā* appointed by the *kalāntar* for each quarter in contemporary Iranian cities)[5] and by nominating the heads of the local guilds. Exactly how heavily the urban population of Mughal India was taxed is uncertain, but among the taxes levied were transit dues (*rāhdārī*), octrois, and levies on the grain, salt, and occasionally, textile markets, as well as various illegal cesses which were regularly outlawed, but which just as regularly were reimposed.[6] State income was also derived from renting stalls and shops in the bazaar. In addition to these onerous duties, the *kōtwāl* had a number of other miscellaneous duties, some of which lay clearly within

[1] Lambton [389], 11–14.

[2] But Aurangzeb may have perceived the need to separate the functions of *kotwāl* and *muḥtasib*. As one scholar has written, presumably with regard to Aurangzeb's predecessors, 'The Mughals found it administratively convenient to entrust the duties of the *muḥtasib* to the *kotwāl*, with harmful effects first on the religious and moral welfare of the Muslims in India, then on their social and cultural life, and ultimately on their rule.' Ansari [214], 493.

[3] See, for example, Sāqī Mustaʿid Khān [164], 110, 242.

[4] For an interesting example of this, see the instructions given to the *kōtwāl* by Nawwāb Muḥammad Sharīf Khān, *ṣūbadār* of Malwa, for the repair of the gateway of the fort of Sarangpur. Rahim [48], 55–7.

[5] Lambton [390], 10–11.

[6] Indo-Muslim governments frequently, and presumably ineffectively prohibited the levying of illegal cesses. For an interesting example of such a prohibition addressed to the *kōtwāl* of Patan (?) in Junagarh during the reign of Sultan Quṭb al-Din Ahmad II of Gujarat in 1455, see: Desai [51]. See also M. F. Khān [49], 79–82; M. F. Khān [52], 69–74.

the sphere of duties traditionally associated with the office of *muḥtasib*. These included checking weights and measures, controlling prices, preventing the sale of wine to Muslims, the expulsion from the town of dishonest tradesmen and religious charlatans, the segregation of butchers, sweepers and washers of the dead, and the proper location of cemeteries and the place for executions. He was also to see that the streets were kept clear of obstructions, to set the idle to work, and to take charge of the property of persons who had died without heirs.

The *kōtwāl's* authority was so extensive and touched so many aspects of urban life that if he and his subordinates carried out their tasks effectively, the towns and cities of Mughal India must have been very strictly controlled on behalf of the central government.[1] This was certainly the view of several contemporary European observers although some of these also noted the fear and dislike in which the *kōtwāl* and his underlings were held by the population as a whole, and their reputation for extortion and brutality.

The present state of research into the conditions of urban life in pre-British India precludes extended discussion regarding the general level of urban violence and the extent to which the authorities were able to control or coerce disruptive or potentially disruptive elements. Recent research into pre-industrial urban societies outside India has tended to point to a prevailing level of lawlessness and opposition to authority far more widespread than was once supposed. This may have been true of at least some of the larger cities of the Mughal empire.[2] The history of Delhi, especially in the late Mughal period, implies long-established habits of turbulence and insurbordination, but even before the period of imperial decline set in, protests and riots were by no means rare. In addition to the hazards of crime and organized violence, and also harassment and persecution at the hands of the agents of government, the ordinary townsfolk had to face other problems – unpredictable fluctuations in the price and availability of essential commodities due to hoarding, famine, inefficient methods of distribution,[3] and the sudden appearance of epidemics in cities where the level of mortality from disease must always have been very high. Yet in general the evidence suggests that so long as the Mughal régime flourished, so also did the towns and cities, and that it was primarily the plunging spiral of imperial administrative disintegration during the late seventeenth and early eighteenth century which brought about profound changes in the established patterns of Indian urban life.

[1] This must have been particularly the case when the office of *kōtwāl* and *faujdar* were combined, of which a few recorded cases are mentioned in the sources, e.g. Yazdani [43], 12–13; *Mir'āt-i Aḥmadī* [164], 172.

[2] Pelsaert [92], (trans.), 57.

[3] Significant facts regarding the prevalence of famine in Mughal India are to be found in Habib [343], 100–10.

2 The Far South

Urbanism is a distinctive feature of the economic history of later medieval south India, and urbanization may well have been the most significant historical process of the period from the thirteenth to the eighteenth century in the sense of being a summation of the most important economic as well as cultural and political trends of that period. Thus, if it were recognized that devotional, or *bhakti*, worship was one of the most significant cultural developments of the medieval age, then the place of the temple as the locus of that worship would be given prominence, and the urban temple centre, often as the pinnacle of a system of rural shrines, would be given first attention. If it were further recognized that the state which commanded the greatest respect and sovereignty of the age – the Vijayanagara state (*c.* 1336–1630) – was based upon heavily fortified administrative centres often under the control of warriors and Brahmans who were strangers to the place (as most Telugu *nāyakas* and Brahman or fort commanders, *durgādhipatis*, were), then, again, attention would necessarily go to such centres and their relationships with extensive rural hinterlands as well as with the premier city of much of that time, Vijayanagara itself. Finally, if it were conceded that the strong trend of evidence on the economy of south India from the thirteenth to the eighteenth century was in the direction of ever greater commodity production in an increasingly monetized economy, then, once again, urban trade and handicraft centres would merit attention.

The term 'centre' in the previous paragraph points to a persistent problem in the analysis of Indian society, historical and contemporary. This relates to the concepts of 'rural' and 'urban' and their utility. The issue is usually phrased in terms of urban and rural continuities and discontinuities and the difficulties of utilizing the categorical concepts, 'rural' and 'urban'. An alternative formulation of the matter has been suggested which emphasizes the structural concept 'centre' in contrast to the concept of 'networks'.[1] The latter refers to a variety of spatial relationships maintained by Indians which might be quite extensive, e.g. marriage networks, trade networks, pilgrimage networks, and political networks of clans and kinship. Networks of relationships are contrasted with relations with centres, the latter being generally construed as urban places with a high density of specialists upon whom all Indians draw for certain purposes. Among these are learned and ritual specialists, governmental officials, and the providers of special goods and services. While this formulation draws attention to several important aspects of social relations obscured in the urban-rural formulation, it leaves several

[1] Cohn and Marriott [273].

matters unclear. Are all 'centres' to be necessarily regarded as 'urban places'? Are there convincing sociological differences between large villages and towns? Is a 'centre' possibly nothing more than a dense network of relationships among persons, groups, and functions which are found in any Indian locality; i.e. is the 'centre' or 'urban place' an idea or conception, rather than a place defined according to specifiable criteria such as persons per unit space or specific kinds of administrative or economic functions?

The ambiguity of terms such as 'urban' and 'rural' is confronted in an important institution of the Choḷa period in south India. Though there were a few cities of considerable size and antiquity (Kānci, Madurai, and Thañjavur), it is another kind of place that commands prime attention in Tamil country and, to an extent, elsewhere. *Brahmadēyas* of the Choḷa period were settlements of great size and wealth under the control of an assembly of Brahmans (*mahāsabhā*). Often called '*taniyūr*', i.e. a settlement separated from the jurisdiction of other settlements in a locality, *brahmadēyas* often had a number of hamlets which were satellite settlements and might include several peasant settlements and, possibly, a trade settlement. The main settlement of a *brahmadēya*, such as the ancient ones of Uttaramērūr (in modern Chingleput district) or Ennaiyiram (in modern South Arcot district) might have several bazaars, special quarters for artisans, schools, hospitals, and other amenities according to which urban places are often distinguished. It is hardly to be wondered, therefore, that many of the great Brahman settlements of the Chōḷa period formed the basis of substantial towns at a later period. Still less is it to be wondered at that it continues to vex sociologists of modern Indian society to find places called 'urban' containing strong elements of continuity with forms of 'rural' organization.

Difficulties in the classification of settlements according to the categories 'urban' and 'rural' are reduced, but not eliminated, after the thirteenth century. Then, one encounters places which possess less equivocal marks of 'town' or 'city'. Temples of the post-Choḷa period became centres of pilgrimage necessitating a variety of facilities seldom before demanded. The temple with its large staff of ritual functionaries, learned persons, and menials required an elaborate infrastructure to supply needs never, or seldom before, so concentrated. It is found that pilgrims, too, placed demands upon temple centres, especially when it is recognized that it was not only worship which occupied the visitor and prompted the visit. Sect business was regularly conducted at temple centres including visits to the shrine of a caste god or goddess and the preceptor of the sect. Trade was conducted; draft animals were bought and sold.

But a more important criterion helps us to delineate a clear 'urban' component in south Indian life during the Vijayanagara period when, progressively, towns became the centres of alien and, often, extortionate rule by the warrior élite of the age. Until the fifteenth century or so, there were incursions of Telugu warriors into Tamil country and parts of Karnāṭaka and the occupation of often neglected tracts of land by these migrants. However, during the late sixteenth century in most places, though earlier in a few places, this dispersed Telugu population was rather suddenly converted into a part of a new ruling estate culminating in the great Telugu *nāyaka* kingdoms established in that century on the ruins of the once mighty Vijayanagara state. Ruling from fortified cities (Śeñji, Madurai, Thañjavur, Bangalore, Vellore), this new politico-military élite continued an earlier Vijayanagara emphasis on trade for strategic and revenue reasons, and in the process reduced the countryside to an exploited appendage of town life. Leaders of dominant landed groups either subordinated themselves to urban power, or lost their ancient local political power. It was a process largely continued in the eighteenth century by the British.

To an extent, the factors impelling urbanization in the micro-region during this period dictated the composition of urban places. However, few urban places were without three elements which together account for the significant urbanization of the time. In most towns, there were temples, some administrative functions including military ones, and there were markets and handicraft production. The mix of these elements varied and created different urban qualities.

Of the forty or so major Hindu shrines in the macro-region cited in the work of P. V. Jagadisa Ayyar and similar studies,[1] most enjoyed prominence between the thirteenth and eighteenth centuries. Among these, several had enjoyed ancient reputations as sacred places; most others date from the period under consideration here, though these, too, were often named as early sacred places in the hymnal tradition of south Indian Śaivites and Vaishnavites. In most cases, temples appear to be in towns whose origins can be dated from the time when the major construction of the temple structure occurred. The towering gateways (*gopurams*) that mark Pāṇḍyan and Vijayanagara architectural styles dominate the urban landscapes. In a few cases, the town was sited adjacent to or at the foot of the hill where the major temple was, and these towns, too, dated from at least the time when the distinctive architectural features of Vijayanagara temples were added to existing temple structures.

Texts of the medieval period state that the *nagara*, or city, was incomplete without a major shrine; certainly, a major temple could

[1] *South Indian Shrines* [516a].

scarcely exist without an urban context. The two institutions complete each other. 'Completeness' here is intended to be understood in several sense. Towns, like villages, required a place deity, a tutelary, to protect its people from misfortune. Thus, Śiva, as the deity, Virūpāksha, was the tutelary of the capital city of Vijayanagara and Paḷḷikoṇḍaruḷiyadēva, the tutelary of Paḷḷikoṇḍa. There might be several temples in a sacred or administrative centre, but one was regarded as the tutelary. During the Vijayanagara period, the major deities of many temple centres were goddesses (e.g. Kāmākshī at Kānci, Mīnākshī at Madurai, Bṛihannāyakī at Thañjavur) notwithstanding the nominal presiding presence in these places of a male, vedic deity.[1] These goddesses, too, were considered as guardian deities of the cities where their major shrines were.

A second sense of 'completeness' is that towns and cities came into existence as adjuncts of the construction of temples. A classic example of this is the town of Tirupati at the base of the Veṅgadam hill abode of Veṅkatēśvara, at Tirumalai. Legend associates the Vaishnavite teacher Rāmānuja with the founding of this town to serve the hill temple. While the Tirumalai shrine remained the primary one of the place, several important temples were established in Tirupati town as well, thus making the locality one of the very important sacred sites in south India.

Urban places lent 'completeness' to the society and culture of the macro-region during the medieval age as suggested in the idea of the town or city as the summation of elements of rural social and cultural organization. Caste, sect, and political elements – the stuff of networks of relationships on the countryside – are represented in paradigmatic form in the urban places of the macro-region. All sub-castes – the basic functioning ethnic groupings in rural society – realized their joint membership in a caste through ceremonies in, and affiliations with, towns and cities. Among the most important caste functions of groups from Brahmans to the lowest ranks of non-Brahman agricultural, artisan, and merchant sub-castes occurred in urban places. Sub-caste and caste preceptors were urban men whose clientele might be dispersed over a radius of fifty or a hundred miles. They presided over caste assemblies dealing with the most important regulative functions of castes. According to the *Baramahal Records* of the late eighteenth century,[2] Koṅgu Veḷḷāḷa agriculturists living in the western portions of modern Salem district (Rasipur, Tiruchengodu, and Namakkal taluks) were linked to a centre of caste affairs in distant Kangayam town (Dharapuram taluk, Coimbatore district) where sub-caste and caste affairs were adjudicated. Cultic affiliations of these respectable castes of Brahmans and non-Brahmans were centred in temples and *maṭhas* of

[1] Stein [522], 79.
[2] Records of Fort St. George [35], section III.

temple cities. It was expected that members of Śaivite and Vaishnavite orders would regularly undertake pilgrimages to the major temple of their sect at periodic intervals for worship and to pay their respects (and tithings) to the sect leader (*guru*).

Kānci was a focal point for many of the sectarian and caste activities of the central Tamil plain just as Tirupati was for the northern portions of the plain and as Palni, Nanjunad, and Pērūr for the southern and western parts of the interior upland of the macro-region. To Kānci came members of peasant castes as well as artisans and merchants of left and right caste groupings. Here, there were maintained separate temples, *maṭhas*, shelters and feeding-houses, and even dancing girls for persons in each of the caste divisions.

It is hardly surprising, therefore, that Kānci was the site of much social conflict during the medieval and early modern periods among sectarian and castes groupings. Śrī Vaishṇava Brahman votaries of the Vadagalai and Tengalai sections in 'Little' or 'Vishnu' Kānci fought in the streets over precedents and rights in Vishnu temples. Similarly, groups of right and left castes occasionally ran riot because of perceived breaches in the established rights of each in the city pertaining to such things as marriage, funerary and other processions. These conflicts often required political intervention. A Tamil inscription of 1487 found at a village in Cuddalore taluk of modern South Arcot records that a charter drawn in distant Kānci had been granted in favour of Kaikkoḷa weavers permitting them the use of palanquins and conch-shell bugles as they went about the streets.[1] Other temple centres served a like purpose elsewhere in the macro-region. During the early thirteenth century, Koṅgu artisans and traders of the left division of castes – *Kanmāḷās* – won the right to use conch-shell bugles and horses at their funerals, to wear sandals, and to cover their houses with plaster after what must have been serious conflicts against caste rivals. Significantly, these newly-won rights were recorded at three of the major temple towns of Kōngumaṇḍalam: Karūr, Modakkūr, and Pērūr.[2]

An independent stimulus to urban development was military. The south Indian macro-region adds several excellent examples of fortified cities to the number of impressive cities in the sub-continent. Vijayanagara, the capital city of the empire from 1340 to 1565, was one of the greatest fortified cities of all of India. Others included: Śeñji (Gingee), Dindigul, Chandragiri, Tiruchirapalli, Vellore, Bangelūru (Bangalore), Madurai, and Thañjavur.[3] Most of these places were created as fortified cities during the Vijayanagara period though all had attained fame as a strategic defensive point at a much earlier time. Several were hill

[1] Department of Archaeology [219], No. 422 of 1925.

[2] Arokiaswami [221], 276–7.

[3] Two works by Toy [532, 533] may be consulted.

fortresses commanding views of a subjugated countryside and major road and river routes. Vellore, though not a hill fortress, can be added to Śeñji, Tiruchirapalli, Chandragiri, and Dindigul as fortified points of special importance to the Telugu Vijayanagara warriors whose incursions into Tamil country followed the western edges of the Coromandel plain. Such fortified places were intended to support the scattered settlements of Telugu migrants as well as to provide a commanding presence over the rich Tamil plain from which resources were taken. Madurai and Thañjavur were established cities prior to the Vijayanagara period, but became fortified places between the fourteenth and seventeenth centuries. Double walls, moats, and bastions lent great strength to these places, and all were meant to withstand artillery assaults. Plans of these cities of the eighteenth century show that they contained several temples, bazaars, palaces, harems, and garrison buildings for soldiers and their mounts, and, within each, as well as outside of their walls, were residential clusters for townsfolk.

To the modern observer, there are only slight differences between temple cities and fortified cities in south India. Many urban places were of course both, and all urban places were trade and handicraft production centres. Temple complexes of the late medieval period were great walled places with towering gateways (*gopurams*), and while the latter structural element captures the eye (to the extent of having become the emblem of the modern state of Madras (Tamilnadu)), the series of walls enclosing *prakarams*, or walkways within the temple precincts, give the appearance of a fortified place. It is not clear to what extent temple architecture of the time was influenced by military models or concerns, but in the warfare of the French and British of the eighteenth century considerable use was made of temples as fortified places. It is possible that the warrior supporters of medieval temple religion may have considered the walls of temples as part of the defensive works of cities under their control.

CHAPTER XV

STANDARD OF LIVING

1 Mughal India

Foreign travellers who visited India during the sixteenth and seventeenth centuries present a picture of a small group in the ruling class living a life of great ostentation and luxury, in sharp contrast to the miserable condition of the masses – the peasants, the artisans and the domestic attendants. Indigenous sources do not disagree; they often dwell on the luxurious life of the upper classes, and occasionally refer to the privations of the ordinary people. The sharp contrast between the standards of living of the ruling classes and the common people was, of course, not peculiar to India; it existed in a greater or lesser degree everywhere, including Europe.

Such extremes in income and wealth must, of course serve as a warning against attempting any study of 'average' standards of life during the period. One further difficulty is that quantitative data are few and hard to interpret. One must primarily make the best of the qualitative evidence as it has come down to us, though remembering all the time that it is likely often to be distorted by bias as much as ignorance.

Owing to the marked division of seventeenth-century Indian society into classes and strata with great differences in income, customs and patterns of consumption, it will be convenient to treat separately the standards of living of the peasantry, the city poor, the middle strata and the nobility.

THE PEASANTRY

The Indian village was highly segmented both socially and economically. Recent studies have indicated a considerable inequality in distribution of land, though there was always plenty of cultivable waste-land (*banjar*) available which could be brought under the plough if capital, labour and organization were forthcoming. Village society consisted broadly of three sections: first, the *khud-kāshta*, who were also called *mālik-i-zamīn* or owners of land in the official documents. They are designated

differently in different parts of the country, e.g. *ghārubālā* or *gāveti* in Rajasthan; *mirasī* or *thalwāhik* (from *Sansthānik* or resident) in Maharashtra. They claimed to be the original proprietors of the land they cultivated and were called the 'resident' cultivators by early British administrators. The second section was called the *pāhī*, or *uparī*, 'outsiders'. These were peasants who came from other villages to cultivate land and had their own hutments there. However, they had not yet been granted the position and privileges of the *khud-kāshta*. Lastly, there were the *muzārī'ān* or share-croppers, who rented land from the *khud-kāshta* peasants or the *zamīndārs*. There was also a small class of landless peasants placed at par with the village servants: the tanner, the potter, the washerman. The latter, too, had little or no land, and rendered service to the peasants in return for which they received a fixed share of the produce at the time of harvest. They were sometimes given small strips of land which paid revenue at a concessional rate. They were also enrolled as casual labourers at times of harvest, sowing, etc.

The share of the produce retained by the different categories of peasants after payment of revenue is not easy to compute. The general Mughal formula for the authorized revenue demand was one-third or one-half. The precise share depended on a number of factors – nature of the soil, relationship with the *zamīndār* of the area, traditions, etc. Caste might also have played a role. For instance, in some parts of Rajasthan, members of the three upper castes – the Brahmans, the Kshatris or Rajputs and the Vaishyas or Mahājans paid land revenue at concessional rates. Thus, whereas a normal peasant paid two-fifths of the produce as land revenue, these sections paid one-third or in rare cases, even one-fourth. Land of village officials such as the *chaudhurīs* or *muqaddams* was also assessed at a concessional rate. We do not know, however, whether the upper castes were granted concessional rates all over India or only in certain regions dominated by Hindu potentates.

Thus within a village one would expect considerable inequalities. But these are usually overlooked by our sources in their references to the conditions of life of the peasants. Bābur observed that in India 'peasants and people of low standing go about barefoot'. He then goes on to describe the decency clout worn by the men, the *sāṛī* worn by the women.[1] Abū'l Fazl, the great historian of Akbar's reign, says that the common people of Bengal 'for the most part went naked, wearing only a cloth (*lungi*) about the loins'.[2] Salbank, writing in the early seventeenth century about the people between Lahore and Agra, says that 'the plebeian sort is so poor that the greatest part of them go naked'.[3] But Ralph Fitch, who wrote earlier, is more precise. He says that 'the people

[1] Bābur [168] (trans. Beveridge), II, 519 (translation modified).

[2] Abū'l Fazl [123], I, 389.

[3] *Letters Received*, VI, 187.

go naked save a little bound about their middle', but that in the winter, 'the men wear quilted gowns of cotton and quilted caps'.[1]

The overwhelming impression is thus of scantiness of clothing. Though climatic factors and social traditions cannot be discounted, the quantity of clothing was an index of poverty since the upper classes could be distinguished by the type and quality of the clothes they wore. In those days, though cotton production and weaving was widespread in India, cloth was more expensive relative to wheat than at present.

Regarding women's clothes, we have already referred to the *sāṛī* which was generally made of cotton. Moreland points out that women did not wear any blouses with their *sāṛī*, and treats it as an illustration of the paucity of clothing.[2] His judgement, however, needs to be qualified. There was no emphasis on covering of the breasts in Indian tradition. In Malabar, both men and women, irrespective of their means, remained naked above the waist. In the rural areas of eastern India, till recent times, wearing of a blouse was not common. However, a blouse (*choli* or *angiyā*) was worn by ordinary women even in rural areas of other regions. Thus the contemporary Hindi writer Sūrdās mentions the *choli-angiyā* worn by the milkmaids in the Agra-Mathura region. In parts of western and central India, women wore skirts (*lahangā*) instead of a *sāṛī*, with a *choli* or *angiyā* to cover the breasts.[3]

The poor did not use shoes but generally went barefoot. Moreland says that he has not found a shoe mentioned anywhere north of the Narmada except in Bengal, and thinks that this was due to the high cost of leather. Contemporary Hindi poets, like Tulsīdās and Sūrdās, however, mention *panahī* and *upānaha*, being different types of shoes worn by the city and rural folk. Perhaps they were used by the richer section in the villages. Then as now, women both rich and poor, wore jewellery profusely. Fryer says, 'The rich [women] have their arms and feet fettered with gold and silver, the meaner with brass and glass and tuthinag, besides rings in their noses, ears, toes and fingers.'[4] Ralph Fitch, writing of Patna, said, 'Here the women be so bedecked with silver and copper that it is strange to see; they use no shoes by reason of rings of silver and copper they wear on their toes.'[5]

The housing of the poor in rural areas has not changed much. The bulk of the peasants lived in single-room houses made of mud with thatched roofs. In Bengal, the hut was made by roping bamboos together upon a plinth of mud excavated at the site. In Assam 'rich and

[1] Foster, ed. [85], 22.

[2] Moreland [421a], 275.

[3] The *angiya* (short jacket or blouse) had two main types viz. one, short covering only the breasts and the other long reaching down to the waist. It was used by rich and poor alike. (See Ojha [442], 35–6; also Chandra [264], 101–2.

[4] Fryer [107], II, 117.

[5] Foster, ed. [85], 22–3, 28.

poor' made their houses of wood, bamboo and straw.[1] In Kashmir the houses were made of wood. In north and central India huts were built of mud thatched with straw. The houses of the poor in the south were 'nothing but huts covered with Cajan leaves'. They were so low that a person could not stand upright in them. In Gujarat, the houses were roofed with tiles (*khaprail*) and often built of brick and lime.[2] The poor sometimes shared the room with their cow or goat, but the better sort would have a number of rooms, depending upon the size of their family, space for storing foodgrain and a walled courtyard. The rooms would not generally have any windows, the entrance sufficing for light and air. Manrique found that they were kept very clean with frequent plasterings on the floor and walls with mud mixed with cow-dung.[3]

The peasants' houses had hardly any furniture besides cots and bamboo mats. Linschoten, writing of the west coast says that 'the household stuff of the people is mats of straw, both to sit and lie upon'.[4] Utensils made of bell-metal or copper were expensive and were generally not used by the poor. Iron was used in the 'small iron hearths' upon which the common people 'baked' their bread.[5] In the south 'a copper canne with a spout' for drinking water was 'all the metal' the poor had within their houses.[6] Palsaert indeed says that earthen pots were used even for cooking.[7]

It appears from contemporary accounts that the articles in the diet of the common people in most parts of India consisted chiefly of rice, millets and pulses. In Bengal, Orissa, Sindh, Kashmir and parts of south India, rice, being the major crop, formed the staple diet of the masses. Millets (*juwār* and *bājrā*) held the same position in western India (Rajasthan and Gujarat). Irfan Habib says that 'generally speaking, it was the lowest varieties, out of his produce, which the peasant was able to retain for his own family'.[8] Wheat was not apparently a part of the diet of the common people even in the wheat-producing Agra-Delhi region. Writing of Malwa, Terry says that 'the ordinary sort of people' did not eat wheat, but used the flour of 'a coarser grain', made up in round broad and thick cakes (*chapātīs*) which were 'wholesome and hearty'.[9] Foodgrains were supplemented by herbs, beans and other vegetables which, according to Tavernier, were on sale in the smallest

[1] Kāẓim [161], 727.

[2] Abū'l Faẓl [123], 485; Mundy [96], 258.

[3] Regarding the use of cow-dung in poor as well as in rich houses and its antiseptic qualities, see the accounts of Manrique and Pietro della Valle, quoted by P. N. Chopra, *Social Life*, pp. 103–4.

[4] Linschoten goes on to say that their 'tables, table cloths and napkins' are made of plantain leaves. Plantain leaves and earthen vessels were used in India even by men of better means for eating, since they could be thrown away after use.

[5] Terry [85], 296.

[6] Linschoten I, pp. 261–2; also p. 226.

[7] Pelsaert [92] (trans. Moreland and Geyl), 61.

[8] Habib [343], 91.

[9] Terry, *Voyage of East India*, reprint, London, 1777, pp. 87, 199.

of villages.[1] Fish was more popular in Bengal, Orissa and the coastal areas, including Sind.[2] But fish, too, was not taken either very often or in large quantities, especially by those who lived inland or far from rivers. There was a taboo on beef and pigmeat which extended to hens, eggs and most of the domesticated animals. In the Delhi-Agra region Palsaert says that workmen 'know little of the taste of meat'.[3] He goes on to say, 'for their monotonous daily food they have nothing but a little kitchery [*khichrī*] made of green pulse mixed with rice... eaten with butter in the evening, in the day time they munch a little parched pulse or other grain [*sattu*]'.[4]

In spite of our sources treating the rural population generally as an undifferentiated mass, they do sometimes refer to the conditions of life of the very poor; and then even the modest standards above described would seem no longer to be applicable. The food of the very poor is described as 'boiled rice, nichany [the ragged millet], Millet and grass roots' on the western coast. In Bihar, they ate the 'pea-like grain', which used to cause sickness.[5]

The more prosperous villages could afford more than one meal a day. Th major meal, according to the Hindi poet Sūrdās, was taken at midday or earlier, while a lighter meal (*byārī*) was served at sunset. Buttermilk (*chhāk*) supplemented the meal. *Ghī* was apparently a staple part of the diet in the northern part (except Kashmir), Bengal and western India. Curd and cheap sweets made of milk, jaggery and oilseeds are mentioned by the Bengali poet Mukundarāma as delicacies which the poor could afford only on rare occasions such as festivals, marriages, etc. But Tavernier declares that 'even in the smallest villages sugar and other sweetmeats, dry and liquid, could be procured in abundance'.[6] It may be assumed from this that *gur* (jaggery) was commonly consumed in the villages.

Salt which was a government monopoly was twice as expensive in terms of wheat prices prevalent in the sixteenth century as compared with modern times. Its per capita consumption, therefore, must have been less than now. 'Spices such as cuminseed, corianderseed and ginger were probably within the peasant's reach, but cloves, cardamoms and pepper were obviously too expensive, at least, in the central regions.' Capsicums or chillies were unknown.[7] Fruits of the common kind, mangoes, melons, berries, coconut, etc., were available to the poor in season.[8] Toddy and other intoxicating drinks distilled from plants such as *mahūā* and sugar cane were also used.

[1] Tavernier [104] (2), 38, 238.
[2] Abū'l Faẓl [123], I, 389, 391, 556, 564.
[3] Pelsaert [92] (trans. Moreland and Geyl), 60–1.
[4] Fryer [107], II, 119.
[5] Abū'l Faẓl [123], I, 416.
[6] Tavernier [104], I, 238.
[7] Habib [343], 93.
[8] For the common fruits in India, see: Bābur [168] (ed. Beveridge), 503–13.

It is difficult to draw a comparison between the food available to the poor in medieval and modern times. According to one view, 'the peasant of Mughal times was more fortunate with *ghī*, while his modern descendant has more salt and three entirely new articles of food, maize, potatoes and chillies'.[1] On the other hand, a modern Indian economist is of the opinion that in view of the larger average size of holding, higher productivity of land and a more favourable land:man ratio, 'the standards of food consumption were substantially higher than now'.[2]

It is difficult to compute the amount of money spent on fairs and festivals which were frequent, and provided a welcome relief from the drab life of the villagers. Money was also spent on birth and death ceremonies and marriages, and sometimes debts had to be contracted for the purpose. Pilgrimages were popular.

Famine and epidemics were two major scourges in the lives of the villages. Partial failure of crops due to lack or excess of rain or other reasons was of frequent occurence. Though these led to widespread suffering the peasant often tried to keep a reserve grain in stock to tide over bad times.[3] The state, too, provided relief by remission of land revenue and loans (*taqāvī*). But the big famines which affected large areas and were often accompanied by epidemics disrupted the entire rural economy and led to mass migrations. Relief operations by the state and by private individuals were of little avail.

Nevertheless, the picture of peasant life in Mughal India is not one of acute discontent, except in some areas at different periods. The Agra-Mathura region, inhabited by the Jat peasants was one such area during the seventeenth century. For the bulk of the writers of the period in the various regional languages, the village represented an established way of life in which both joys and sorrows were to be borne with equanimity.

THE URBAN POOR

It is difficult to compute the number or proportion of the poor people in the cities. According to Bābur, one of the good things that could be said of Hindustan was that it had 'unnumbered and endless workmen of every kind'.[4] Apart from artisans and workmen, the cities had large numbers of soldiers and their hangers-on, and a considerable number of servants and retainers, both free and slaves. The employment of large numbers of servants and attendants by the upper classes was a characteristic feature of Indian society of the time. As many travellers noted, a 'man of quality' would not move out in public without being attended by a train of attendants, pages and slaves. Bernier says, 'for

[1] Habib [343], 94.
[2] Desai [285], 61. See also: Moosvi [415], 181–4.
[3] See: Morris [430], 285.
[4] Bābur [168], (trans. Beveridge), II.

two or three who wear decent apparels, there may always be wretched seven or eight poor and ragged miserable beings...'.[1]

We are on somewhat firmer ground in assessing the standard of living of the workmen since their wages have been given in the *Ā'īn*, and also by European travellers during the first quarter of the seventeenth century. According to the *Ā'īn* an ordinary labourer got about 2 *dāms* a day, while a superior labourer could hope to get 3 to 4 *dāms* a day. Carpenters got 3 to 7 *dāms* and builders from 5 to 7 *dāms* per day.[2] Pelsaert says the wages of ordinary servants and attendants at Agra ranged from 3 to Rs. 4 per month, but sometimes the month was regarded as forty days.[3] Pietro della Valle says that at Surat, servants cost very little – about Rs. 3 a month. Slaves were numerous and demanded little more than their keep.

Moreland in 1920 made an attempt to compare the purchasing power of the lowest wage-earners in Akbar's time with those of modern times. Ashok V. Desai tried to do so at a more sophisticated level. This, however, has drawn some criticism.[4] The latest effort is that of Shireen Moosvi, and her table of purchasing power of the lowest wages at Agra in 1595 and 1886–95 is reproduced below (table 14).

Table 14. *Purchasing power in Agra, 1595, 1886–95*

Crops and other products	Purchasing power of lower wages (*man-i Akbarī*)		Index Purchasing power of 1886–95, as % of 1595
	1595	1886–95	
Wheat	5.0	3.29	65.8
Rice	3.0	1.92	64.0
Barley	7.5	4.73	63.07
Jowar	6.0	4.16	69.33
Bajra	7.5	3.37	44.93
Gram	7.5	4.43	59.07
Sugar cane	1.7	1.19	111.21
Salt	3.75	2.15	57.20
Cloth	20*	76.59*	382.95
Ghī	0.57	0.34	59.37

* *Gaz-i Ilāhī.*

[1] Bernier [102] (rev. Constable), 282.

[2] A *dām* was computed at 40 to a rupee in Akbar's time around 1595, but had risen in value to 30 towards the end of Jahāngīr's reign. By the 1660s, it had gone up further to 16 for a rupee.

[3] Pelsaert [92], 62.

[4] Desai [285], 42–62; Moosvi [415], 181–95; Heston's critique and Moosvi's reply, *IESHR*, XIV, (3), 391–401. Moosvi's table reproduced here is from her reply.

It will be seen that while the wage-earner could purchase more wheat, it was an item which hardly figured in his diet. On the other hand, he could purchase more gram, barley, milk and *ghī*. We may, however, agree with Desai's conclusion that 'the purchasing power of the wages was nearly the same in 1595 and 1961. But the low-paid worker of Akbar's time was able to help keep the standard of nutrition much higher than now because of cheap meat, *ghī* and milk. Sugar and *gur* were more expensive; even salt was a little costlier for him'.[1] The modern wage-earner is better off in respect of cloth and industrial products generally.

There is little further to add regarding the living standards of the urban wage-earner. His housing conditions differed little from those of the peasant. He lived in thatched huts even in the capital city of Agra. Bernier refers to a fire in Delhi which burned down 60,000 huts.[2] Cities and houses were crowded, and large families lived in single huts. Famine and pestilence, too, affected the city poor almost as much as the peasant.

MIDDLE STRATA

It is generally agreed that the Mughals had developed a highly centralized system of administration. One is often surprised at the detailed and meticulous records which the Mughal government maintained, including detailed records of prices, taxes, number of houses, names and castes of revenue payees and householders, etc. The *manṣab* and *jāgīr* systems also generated voluminous records. The Mughals needed an enormous number of petty officials such as *dīwān*, *muḥarrir*, *'āmil*, *kārkun*, to cope with the immense secretarial work involved in their system of administration. The lower officials of *manṣabdārs* and the gentlemen troopers (*aḥadīs*) could also be placed within this category from the point of view of income.

It is clear from the account of the travellers that the commercial and financial structure of Mughal Indian was also highly developed. There was considerable specialization of functions among traders. The wholesale traders, shopkeepers, money-changers-cum-moneylenders (*ṣarrāf*), and *gumāshtas* and *dalāls* (agents, brokers) formed separate professional groups. The *Banjāras* specialized in transporting commodities of bulk. There was a keen competition for markets: whenever there was demand for a commodity or a higher profit was to be earned,

[1] From Moosvi's table, however, salt would appear to have been cheaper in 1595. Cf. Moreland [421], 191–2: 'The general conclusion to which these figures point is that urban real wages in north India stood at somewhat the same level in Akbar's time as in 1911, and that there has been no pronounced change in the standard of renumeration of these classes of the population.' This, of course, presents a picture quite different from western Europe during the period, where real wages registered a very great advance.

[2] Bernier [102] (rev. Constable), 246.

the merchants were quick to exploit it. We are told that a village would be small indeed not to have a shroff (*ṣarrāf*) or money-changer. According to contemporary writers, the cities were busy concourses of merchants (*beopārīs*) selling all kinds of goods from jewels and clothes to animals. The master-craftsmen must be considered alongside the merchants. Significantly, in his four-fold division of society, Abū'l Fazl bracketed the merchants and master-craftsmen, placing them below the nobles, but above the religious and intellectual classes.

The professional classes included physicians (*vaid*, *ḥakīm*) teachers (*paṇḍit*, *mullā*), lawyers, etc. They were closely associated with the religious classes which were both numerous and influential, including the *Brahman* and the *mullā* who taught or presided over religious functions, and a large class of persons with a saintly or scholarly bent who received stipends or grants of land (*milk*, *in'ām*, *madad-i-ma'āsh* etc.) from the state. The grants made by the state were supplemented by autonomous rajas, *zamīndārs*, etc. According to a recent study, about 5 per cent of the revenue resources of the Mughal empire were earmarked for such grants.

We may also include in the middle strata the intermediary *zamīndārs* and the rich peasants, though socially the latter were often classified with the peasants (*gaṅwār*). In practice, those sections, along with the *madad-i-ma'āsh*-holders, formed the rural petty gentry.

Thus, the middle strata were by no means quantitatively inconsequential in medieval society. They had important positions in the urban as well as in the rural sectors, and were considered genteel (*ashrāf*, *bhadra-lok*) as distinct from the commoners.

We have more information about the living-standard of the class of petty officials than that of the others. In general, it appears to have been fairly prosperous. Thus, we are told that one Sūrat Singh, who had never served in any capacity higher than a clerk (*kārkun*) purchased a house for Rs. 700 in a respectable locality of Lahore, while another petty official, Khwāja Udai Chand, spent Rs. 3,000 in constructing a well attached to a *dargāh*. Some of the *amīns* and *faujdārs*, purchased land and built small townships (*purās*) consisting of orchards, *sarāis*, *ḥammāms*, etc. which brought considerable income.[1] It has been surmised that the group of revenue officials who enjoyed this prosperity consisted mostly of Brahmans, Kayastha, Khatris and Baniyas. Revenue officials seem to have become prosperous in the provinces also. Thus, in Bengal, many of the *dīwāns* and *bakhshīs*, serving the local rajas, as well as the *qānūngos* became wealthy *zamīndārs*.[2] Their prosperity certainly did not depend upon their salaries, but on their manipulations, including bribe-taking, defalcation of revenue and revenue farming.

[1] See: I. A. Khan [380], 20–49.

[2] Chatterji [265], 200.

Perhaps this prosperity did not wholly extend to the intellectuals, who in general remained poor and dependent upon patrons. There were certain exceptions, as in the case of Abū'l Fazl and Bīrbal, who rose in the service of Akbar. The physicians, many of whom were employed by the *manṣabdārs* to look after their troops and who had numerous clienteles, seem to have been prosperous.[1]

The salaries assigned to the petty *manṣabdārs* gave them a standard of living far above the common man. But their condition seems to have deteriorated during the second half of the seventeenth century due to paucity of *jāgīrs*, frequent transfers, and rampant corruption. Bernier says that the houses of the *manṣabdārs* at Agra had 'tolerable appearance'. Only a few of them were built of brick and stone; but they were still 'airy and pleasant'. They were 'commodious inside and containing good furniture'. The walls were of mud covered with lime. The houses had thatched roofs supported by 'layers of long, handsome and strong canes'. These, along with the thatched houses of the poor, were the causes of frequent fires in the city.

The merchants lived at the back of their shops. According to Bernier, they were 'handsome enough from the street' and 'tolerable commodious within'. In Delhi, the houses were of bricks, with the roofs serving as terraces. Some of them were double-storeyed and had beautiful terraced roofs. The majority of the houses in Varanasi, according to Tavernier, were built of brick and stone.

We know very little about the living standards of the *zamīndārs*. Many of the *zamīndārs* had their small fortresses (*qil'achas*) in which they and their family lived. They also had bodies of armed men, only a few of whom could have been regularly paid. It is possible that some *zamīndārs* and rich peasants spent their surplus on acquiring more land. This could be done by bringing fresh land under cultivation or, more often, by developing as moneylenders and foreclosing lands given on mortgage to needy peasants.[2]

The rural rich had sometimes enough resources to enable them to indulge in conspicuous consumption. Sūrdās mentions the large number of dishes prepared on festive occasions in the house of Nand (who is called the *shiqdār* of the *pargana* of Brij near Mathura). He also mentions the use of furniture and soft bed-sheets in his house. The women of this class used multi-coloured *sāṛīs* of various types, while the men used *jāma* and *qabā* like the city-folk. Obviously, cloth for such garments could hardly have been procured from the local craftsmen. The villages where the richer sections lived could not, therefore, have been wholly isolated from the city markets.

[1] I. A. Khan [380], 10.

[2] Singh [505].

THE UPPER CLASSES

The upper classes in Mughal India consisted of the nobles, the autonomous chiefs and rajas, and the wealthy merchants in the towns. The Mughal nobles received salaries which were probably the highest in the world at that time. In addition to their personal (*ẓāt*) salaries, the nobles were allowed considerable profits on payments of salaries to their soldiers (*tābīnān*). The soldiers were rarely paid on time and sometimes their salaries included discarded clothes, etc. Some nobles engaged in trade and so augmented their income. Some, again, put money out on interest to merchants. Abū'l Faẓl advised the nobles 'to indulge a little in commercial speculation and engage in remunerative undertakings, reserving a portion in goods and wares', and invest in the speculation of others. Establishing orchards and markets was another favourite form of investment. The commercial speculations of some nobles, such as Mīr Jumla, included a fleet of ships which operated all over west and south-east Asia. Thomas Roe adds that 'great and small are traders'. Thus, the Mughal nobility did not look down upon trade and traders. Nevertheless, income from land revenue remained the main source of income.

One may agree with Moreland that 'spending not hoarding' was the dominant characteristic of the pattern of life of the nobles. Much money was spent on the upkeep of their house and their large harems. According to Monserrate, Delhi had fine private houses, 'well-built, lofty and handsomely decorated'.[1] Bernier says that a house was considered beautiful which was spacious, and had a courtyard, garden, trees, a basin of water, and handsome furnished apartments with large fans.[2] In Bengal, the nobles' houses were built of bricks, some of them in three storeys and in grand style. A single house in the Deccan cost a noble Rs. 150,000. The furniture included bedsteads, mirrors, chairs and stools, all richly decorated with inlay work. Fine wooden boxes of inlay were produced in Gujarat and were in wide demand. The floor was often covered by rich carpets and cushions. Berniers says that the whole floor would be covered by a cotton mattress, four inches thick. A fine cloth was spread over the floor during summer, and silk carpets during winter. The cushions were quilted with 'flowered' cloth, ornamented with delicate silk embroidery, interspersed with gold and silver, or with brocaded velvet and flowered satin. The roof, too, would be richly gilded, with costly hangings of rich curtains.

Next to the household, the nobles spent lavishly on their table. A hundred dishes were served whenever Abū'l Faẓl took his meal. The

[1] Monserrate, *Commentary* (trans. Hoyland and Banerji), p. 97.
[2] Bernier [102], 247.

finest fruits were imported from central Asia and Afghanistan for the tables of the nobility. Ice, which was an item of luxury, was used by the nobles the year round. A wide range of spices were used to flavour the food. The nobles freely indulged themselves in wine, the best of which was imported from west Asia. Even women drank wine within the harem. Coffee (*qahwa*) imported from Arabia was a luxury that the upper classes alone could afford. Other cooling drinks included sherbet made from fruits. Food was invariably served in costly porcelain dishes, or dishes of gold and silver. Both the household and the kitchen needed a large staff of low-paid servants, men and women.

In the matter of clothes, the nobles followed the fashion set by the court. Their clothes were generally of cotton, plain or painted, and silk, plain or striped. The garments worn by members of the upper and middle classes were similar, being distinguished only by the quality of stuff used. The clothes consisted of a *shalwār* (drawers) and breeches or tight-fitting trousers made of cotton or plain or striped silk. The shirt hung over the breeches. In the winter, over the shirt, they wore an 'Arcabick' or vest stuffed with cotton, and loose-fitting coat called *qabā'*, which generally came down to the ankles. A shawl on the shoulders or a *paṭkā* round the waist and a turban completed the dress. The clothes of the ladies were similar; but these were sometimes of such a fine texture that they were used only once. Stockings were generally not used, because of the heat, but costly shoes of leather or silk with gold or silver thread were common.

Both men and women were accustomed to adorning different parts of the body with jewellery. Since the time of Jahāngīr, even men pierced their ears to wear earrings.

Much was also spent on the stables. Each noble had to maintain a transport corps consisting of elephants, camels, mules and carts as prescribed by regulations. The camp equipage was costly: tents were sometimes made of silk or brocade. For transport, palanquins carried by a number of men were used.

Bernier noted that, due to their lavish expenditure, few nobles were solvent. However, prudent persons could save money. The chronicles give us the names of many nobles who left large properties at the time of their death. As was the Mughal custom, the goods left by a noble were carefully listed, and after the dues of the state had been met, the remainder were distributed by the emperor among his heirs. Aurangzeb modified the old rule: the property only of those nobles who had dues towards the state was escheated. Even then, the ruler reserved the right of dividing his assets not according to Islamic law, but on the basis of his assessment of the worth of his sons.

Our knowledge of the scale and pattern of consumption of the

autonomous rulers is rather limited. The imaginary account of Ujānī in Mukundarāma's *Chaṇḍīmangala* reads very much like an idealized picture of a seat of a contemporary chief, with a stone fort in the centre and bamboo stockades around it. From paintings it is clear that Mughal dress and style of living influenced the autonomous chiefs far and wide, from Bengal to the Kangra hills and from Jammu to Mewar.

There were many rich merchants particularly in the coastal towns who rivalled nobles in luxurious living. Some of the merchants of Bengal and Gujarat had 'stupefying wealth'. We are told of merchants who were worth at least Rs. 8 million and drove as big a trade as the East India Company.[1] Bernier's statement that, except in the coastal ports, the rich merchants 'studied indigence' lest they be used as 'field sponges', could only be partially correct. The *Baniyās* of Agra owned big palatial houses. They did not imitate the living-standards of the nobles, partly owing to the habits of frugality, and partly because of lack of safety in many towns where thefts were frequent. In Surat, Fryer found that the Muslim merchants had many beautiful houses, terraced, with plastered walls. In Bengal, there were two types of houses mentioned by Ruparama: *chārchālā* and *bāngalā* or bungalow. *Jaltungīs* – or houses built on raised platforms in the middle of water-tanks – were greatly fancied.

Like the nobles, the merchants also spent large sums of money on marriages. Thus, Khemchand is said to have taken Rs. 15 lacs for the marriage of his daughter when he was robbed on the way.[2] The highest expenses on a marriage recorded were those on the occasion of Prince Dārā Shukoh's marriage, amounting to about Rs. 32 lacs.

The pattern of life of the nobility and the upper classes in Mughal India has become a byword for luxury and ostentation. There is no evidence to show that the puritan style set by Aurangzeb had any marked effect on the lives of the nobility. During the eighteenth century, even while the boundaries of the Mughal empire shrank, the lavish style of living of the nobles did not change. However, it would not be right to think that the life of the upper classes did not have a direct impact on the economic life of the country. Production increased to cater to the demand of all kinds of luxury goods. Fine cloth from Bengal and Gujarat and other articles of luxury produced in different parts of the country were in keen demand. As Moreland says, something like a national market had developed in cloth. But his assumption that the demand of the nobles and the court for 'toys' or their taste for imported goods had an adverse effect on domestic production[3] is not borne out

[1] Bernier [102], 229–30.

[2] Chaudhuri [269], 94–5. According to Boccaro, a seventeenth century traveller to Sindh, even an ordinary Hindu would spend Rs. 4,000–Rs. 5,000 on a marriage. Quoted by Chopra [271aa], 26.

[3] Moreland [421a], 257.

by detailed studies, made by Moreland himself and by others. The demand for 'toys' was not a steady demand for any product, as the English found to their cost; India also imported a certain amount of costly cloth and wines from west Asia. But her imports were small compared to her exports, the balance being met by the import of gold and silver.

The nobles also provided patronage to the fine arts, especially to music. The autonomous rajas also did not lag behind. A court which did not have a poet laureate was poor indeed. Painting was also patronized. Mughal centralization led to the growth of a remarkable degree of cultural synthesis among the upper classes. The degree to which this embraced the rural 'rich' is a matter of conjecture.

The extent of charity by the upper classes is difficult to compute. Religion upheld it as a virtue. As we have seen, *in'ām* or *śāsan* lands were supplemented by grants made by local rajas and *zamīndārs*.

2 Maharashtra and the Deccan

The information relating to the standard of living in the Deccan and Maharashtra is scarce and fragmentary. On the basis of such unsatisfactory data, a sketchy account is given below of the rural people, the urban residents and government servants.

RURAL PEOPLE

As was pointed out in chapter IX, there was a considerable economic differentiation among the peasantry in the medieval Deccan. The small peasants who held the land below 10 acres or so as well as the village artisans and servants may be regarded as the rural poor. Though the living conditions of the small peasants of the time is little known, there is hardly any doubt that the ordinary rural folk used to live in mud huts thatched with straw.[1] They seem to have worn fewer clothes than they do now, possibly due to the simpler habit of the age.[2]

When the village artisans and servants collectively called twelve *balutedārs* were given their *balute*-payment in cash instead of in kind, the annual amount was Rs. 10 each to carpenter, leather-worker, rope-maker, and mahār (an untouchable caste of watchman and other menial workers), Rs. 5 each to blacksmith, potter, barber, and washerman, and Rs. $2\frac{1}{2}$ each to goldsmith, astrologer, Hindu temple-keeper, and Masjid-keeper in a western Deccan village towards the end of the eighteenth century.[3] At any rate, these cash payments were remarkably small in

[1] Careri [109] (ed. Sen), 131.
[2] Moreland [89], 26–7, 76–7; Tavernier [104] (2), 322; Foster [85], 16.
[3] Fukazawa [308], 28–9.

amount as compared with urban wages to be mentioned later. Moreover, it should be noted that the *balute*-payment was not made to each family of *balutedārs* but to each *watan*, so that if there were several families sharing a *watan*, they had to divide the money among themselves. As a matter of course, it must be added that the *balute*-payment was not the sole income for them; each of them was entitled to a share of the offerings dedicated to village temples and also received occasional perquisites. Many of them further enjoyed a small plot of *inām* land granted by the village community. With these customary incomes, however, their life seems to have been by no means easy. But at the same time it must be remembered that the service and remunerations of the village artisans and servants were not based on a competitive principle or meant for commodity production; in normal times at least, a minimal subsistence was assured to them by the village community as long as they remained in and worked for it. Besides, they could work for the markets in their spare time and earn the extra cash income. Accordingly, not all of them were paupers. For instance, about the middle of the eighteenth century two goldsmiths employed in a western Deccan village are stated to have each owned Rs. 50 to 200, and one of them paid an emergency tax of Rs. 36, while a washerman of the same village is said to have hoarded Rs. 500 under the floor of his house.[1]

As pointed out in chapter VIII there were not a few peasants who held more than 30 acres of land; presumably many of the *mīrāsdārs* were such peasants. They may have included the hereditary village officers and been considered the rural rich of the time. Though it is difficult to offer any concrete evidence regarding their standard of living, they appear to have lived in affluence in normal times. For instance the Reddi peasants in the eastern Deccan would live in stone houses, and their women-folk wore many gold and silver ornaments during the seventeenth century,[2] and not a few of the Maratha peasants in the western Deccan used to have one or several domestic slaves in the eighteenth century.[3]

Zamīndārs (*deśmukhs* and *deśpāṅdes*) and other large *ināmdārs* may be regarded as rural aristocrats. Especially the *zamīndārs* held not only several *inām* villages and many plots of *inām* land, but also received various perquisites from all the villages in the sub-district under their charge.[4] Moreover, at least in the eastern Deccan, they were entitled to a share of the revenue (e.g. 5 per cent) from the sub-district. For instance, in the later seventeenth century Mughal Deccan a *deśmukh* was allowed to receive Rs. 1,717 per year as his share of the revenue from

[1] Parasnis and Vad [26], VII, No. 546, 156r. and 161r.
[2] Sherwani [498], 189.
[3] Fukazawa [310], 14.
[4] Fukazawa [305], 52–6.

the sub-district comprising thirty-three villages, in addition to *inām* villages and *inām* land.[1] With these incomes each of them used to maintain a fortress as well as his own militia of some dozens to several hundreds in number.[2]

URBAN RESIDENTS AND GOVERNMENT SERVANTS

Domestic slaves owned by urban residents and government labourers, artisans, ordinary soldiers and the like, may be considered the urban poor. As evidence on slavery is available only for the eighteenth century we shall refer to it later.

As pointed out in chapter x, in the early seventeenth century on the Coromandel coast, blacksmiths, goldsmiths and other similar artisans used to get 8.4 to 9.6 pice a day, and their helpers 2.8 to 3.2 pice. As against this, the miners employed at the goldmines at Kulur were paid a relatively meagre wage of 2 pice a day about the middle of the century. In the Bombay island the standard wage paid by the British to their cooly labourers was 2.5 to 3 pice a day about 1675.[3]

In the same period, the lowest-class soldier (*bārgīr*) under Shivājī is said to have been in receipt of 9 *hons* per annum[4] (approximately Rs. 3 per month or 1.6 annas a day), while in the eastern Deccan under the Mughals 'normal annual pay for an ordinary soldier or labourer' is stated to have been Rs. 60[5] (or about 2.5 annas a day). In the western Deccan under Shivājī before 1666, foodstuff is said to have been so cheap that a pice could buy more than 1 *ser* of wheat, jawar, or gram obviously in urban areas, and more than 2 *sers* of rice in the countryside.[6] Accordingly, a daily wage of 1.6 annas (or 6.4 pice) could be enough to support a small family.

At any rate the above figures suggest that the nominal wage, if not the real one, paid to the labourers was raised several times in the eastern Deccan during the seventeenth century. It also seems probable that the wage to the soldiers and labourers was somewhat higher in the eastern than in the western Deccan.

During the eighteenth century in Maharashtra there was a custom for the private as well as government slave to be paid a *ser* of coarse grains a day per head; in addition he/she was given a separate room. Besides, the government slaves at least were granted a small amount of money for clothes on important festivals, and also paid pocket money of Rs. 30 every year.[7] Similarly, a prisoner engaged in manual labour was given

[1] Richards [467], 140.
[2] Fukazawa [310], 14; [304], 48.
[3] See the relevant portion of chapter x.
[4] Kulkarni [387], 177.
[5] Richards [467], 140.
[6] Kulkarni [387], 259–60.
[7] Fukazawa [310], 19.

a *ser* of coarse grain a day.[1] A charman of the government employed at Satara was paid a *ser* of rice a day as his wage.[2]

It is very difficult to know the exact weight of the then *ser* in pounds or grammes. If we follow S. N. Sen who puts one Poona *ser* at a lb. 15 oz.[3] or about 880 g., a *ser* of grains could be more than enough for an adult person, while rice seems to have been more than twice as valuable as the coarse grains.[4]

But wages were paid in cash perhaps more often than in kind. For instance, when three tailors were employed by the Poona government to make the Peshwa's robes in 1750, they were jointly paid Rs. 1–2 per two days (or 3 annas a day per head on the average). Then in 1765–6 peons employed at Nasik mint were paid Rs. 6 each obviously per month (or more than 3 annas a day) as pointed out in chapter IX.2. Taking into consideration the prices of foodstuff as shown in note 4, below, the wage of 3 annas a day could possibly provide the recipient with 3 *sers* of flour, grain or pulses, and a bit of milk and vegetables; probably enough to maintain a small family.

Thus the urban poor were not always paupers in normal times. Rather, some of them seem to have been fairly well-to-do. For instance,

Amount of Foodstuff Available per Rupee in *sers* (unless otherwise stated) in Maharashtra

	Date and place							
Foodstuffs	June 1719 (Sagunashi)	July 1719 (Kolhapur)	Aug. 1719 (Kāsārvadī)	Oct. 1719 (Masūr)	May 1719 (unknown)	May 1748 (unknown)	March 1750 (unknown)	Aug. 1755 (Koregaon)
javar	56	—	—	—	—	—	—	—
bajri	40	—	—	22	—	—	—	—
gram	38.4	—	—	—	—	20	—	—
rice	18.7	—	—	—	—	—	—	8
ghee	3.25	—	—	—	—	—	—	2
raw sugar	4.7	—	—	8	—	—	—	—
oil		4	—	—	—	—	—	4.5
salt	—	—	16	—	—	—	—	—
turmeric			4.5	4.5	—	—	—	—
wheat flour	—	—	—	16	—	20	12	16
milk	—	—	—	—	20	—	—	—
pulse						19		
betelnuts	4	—	—	—	—	—	—	—
betel leaves	1400	leaves	—	—	—	—	—	—
vegetables	—	—	—	—	—	—	32	—

Source: Parasnis and Vad [26], II, Nos. 256, 257, 259, 263, 268, 273, 274, 276.

[1] Parasnis and Vad [26], II, No. 305.
[1] Parasnis and Vad [26], II, No. 279.
[3] Sen [486], 670.
[4] Refer to the table above, though it is very inadequate.

in 1749 a solitary Muslim traveller, possibly a musician or an artisan, died on his way leaving the following belongings: Rs. 157–8 in cash; a shawl, a woollen blanket, a loin-cloth, a carpet, a coverlet, two floor cloths, two felt caps and so on; a small pony with a saddle, a bridle, and a mouth-bag; a curry comb, a pair of horseshoes, a griddle, a pair of pincers, and a grass-cutting sickle; a Jew's harp, a hubble-bubble, two brass vessels; some amount of crystal glass, camphor, conch-shells, pewter, and so on; three thimbles, two finger rings, a rosary, a necklace and so on.[1]

As against the ordinary urban residents there were many rich merchants, bankers and jewellers in large cities during the seventeenth century. They were Hindus, Muslims, and foreigners such as Persians and Armenians.[2] During the eighteenth century, too, large cities like Poona, Aurangabad and so on, contained many rich persons, who would lend a considerable amount of money to government. In the eight months of the year 1740–1, for instance, the Poona government borrowed at least Rs. 1,351, 690–9–8 at the monthly rate of interest from 1 to 2½ per cent from twenty-five persons, presumably merchants or bankers, and three of them loaned each Rs. 300,000–1–0, Rs. 193,850–7–8, and Rs. 175,000.[3]

Finally, the military and civil officials of the government may be classified as urban aristocrats of the age. In the Muslim kingdoms of the Deccan, while the middle-class officials were in receipt of the revenue from several villages through their agents, high-class officials were assigned the revenue from a large region often extending over several sub-districts, and maintained a large number of soldiers and retinue on their own account.[4] In the Maratha government under Shivājī, the middle-class officials both in the army and the central departments are stated to have received an annual pay of 100 to 500 *hons* (about Rs. 400 to 2,000), while his ministers were paid 10,000 to 15,000 *hons* a year,[5] in addition to the temporary assignment from the *chauth* (one-fourth of revenue) from the foreign territories. In the first half of the eighteenth century the ministers under Shāhu were granted a similar cash salary (viz. 10,000 to 16,000 *hons* per annum), along with the hereditary assignment of revenue from a certain territory.[6]

At any rate, it may be said that at the end of the period under consideration, the cash salary of ministers was roughly 700 to 900 times

[1] Parasnis and Vad [26], II, No. 248.
[2] For Hyderabad: Careri [109], (ed. Sen) 135; for Rajapur under Shivājī: Carré [105], (ed. Fawcett), I, 201.
[3] Parasnis and Vad [26], II, 170–2.
[4] Fukazawa [304], 61–3; Carré [105], (ed. Fawcett) I, 233, 296.
[5] Kulkarni [387], 174–7.
[6] Parasnis and Vad [26], I, Nos. 100, 102, 103, 111, 114, 123, 124, 143, 146, 151, 156, 159.

as much as the wage, for instance, of the tailors and peons employed by the government for the daily payment of 3 annas as mentioned before, assuming that they were paid the same amount all the year round.

Despite a great difference in the standard of living among different classes both in the rural and urban areas, the routine life of the people in the medieval Deccan was marked by a degree of stability in normal times. But this stability was often gravely disturbed by the sporadic famines, wars, and other calamities.

FAMINES AND WARS

In the medieval Deccan, the first great famine of which some information is available took place in 1630–1. This was caused by the failure of the rains in 1630–1 and then by excessive rainfall the next year.[1] In this famine a million people are said to have perished in the district of Ahmadnagar alone.[2] This famine was so acute that the reduced revenue from the Mughal Deccan provinces was unable to meet the administrative expenditure of the provinces up to the middle of the seventeenth century.[3] Minor famines on a regional scale recurred in the Deccan in 1655, 1682, and 1684. In 1702–4 another great famine took place, which is estimated to have killed over 2 million souls and caused many hungry people to be sold as slaves.[4] These famines were usually followed by plagues.

When great famines and other calamities took place, government as a rule had to remit the revenue, and would import foodgrains from surplus zones to open government shops and free kitchens for the afflicted people. And these measures were sometimes emulated by *zamīndārs* and other local magnates as well. Nevertheless, they were recurring curses to the people of the medieval Deccan.

Beside natural calamities there was the devastation caused by wars. For instance, in the eastern Deccan and northern Tamil country during the 1640s, recurring wars along with regional famines caused many people to run away to safer places, and about 150,000 people to be captured by invading Muslim armies, so that by 1647 the peasants and artisans of the affected regions were estimated to have decreased to a quarter of their former number.[5] In the western Deccan, too, from the middle of the seventeenth century onwards, Poona, Junnar, Udgir and Ausa regions, for instance, were frequently damaged by fighting between the Mughals and the Marathas; in early 1662 alone some

1 B. D. Verma (trans.), 'Hadiqat-ul-Alam or the History of the Qutbshahi Rulers of Golcondah', V. S. Bendre, *Govalkondyācī Kutbshāhī* (Quṭbshāhī of Golconda in the Seventeenth Century), Poona, 1934, 36.

2 Habib [343], 104.

3 Moreland [424], 218.

4 Habib [343], 106–7.

5 Raychaudhuri [465], 160.

seventy to eighty villages near Poona were burned down and plundered by the Mughals, and people absconded to nearby mountains.[1] The wars between the 'Ādilshāhs, the Mughals and the Marathas caused a considerable decline of Rajapur by 1662, one of the most important ports of the western coast.[2] Then Chaul, another important port, was long troubled by the Portuguese and finally reduced to insignificance by the great fire of 1674.[3]

Above all, the protracted wars between the Mughals and the Marathas from the late seventeenth to the early eighteenth century created somewhat anarchical conditions not only in the western but also in the eastern Deccan, and are believed to have caused a general economic decline all over the Deccan.[4]

But after all, the natural and man-made calamities, though frequent, do not seem to have been more than passing phases for the economic history of the medieval Deccan; they did not revolutionize or materially change the basic tenor of the economic life of the age. As soon as they were gone, the afflicted people, if not killed or enslaved, would return to their former places, or settle down in new localities, or simply become migratory, and resume their life with more or less their former standard of living.

[1] Y. H. Khan, ed. [13], 27. Also see: ibid. [13], 77, 87, 91.
[2] Gokhale [320], 333. [3] Fawcett [297], I, 106.
[4] Gokhale [320], 341–2; Richards [467], 263, 314–16; Alam [209], 86–9.

APPENDIX

THE MEDIEVAL ECONOMY OF ASSAM

I THE STATE AND THE RICE ECONOMY

Political setting

The land of Kamrup that once extended from the easternmost limits of the Brahmaputra valley to the banks of the river Karatoya was long in ruin when, in the early thirteenth century, Turko-Afghan adventurers from Bengal and the migrant Ahom (Tai) settlers from upper Burma appeared on the scene. No more was there any semblance of a central kingship left. Nor was it to reappear during the subsequent centuries under review. Instead, there persisted a fragmented political system. Several new tribal state formations, as well as a number of petty non-tribal and armed land-controllers (*bhuyān/bhaumik*) – the latter mostly concentrated in the western and central parts of the region – coexisted side by side.

The Ahoms were an advanced plough-using tribe. Their rudimentary state had at its base not only their own settlements but also the subjugated non-Ahom villages, both settled and shifting. The Ahom nobility had domains allotted to them, and at their head was the king chosen from the royal clan. The king appointed select noblemen to important offices and could dismiss them when necessary. In turn, he was himself appointed and could be removed from office by the council of the great nobles. The adult male population owed the obligation of periodic service to the state. The utilization of the manpower pool was organized by the king with the help of a hierarchy of officers. The latter were entitled to exploit a portion of the mobilized labour for their own private gains. The Ahom polity was thus a quasi-feudal structure on a largely tribal base. Its economic aspects will be discussed later.

Of the two other medieval tribal state formations, the Chutiya kingdom was completely absorbed into the Ahom state by the early sixteenth century. The Kachari kingdom, too, was gradually pushed back by the Ahoms further south-west to a precarious existence, often under conditions of vassalage. At the same time, the westward thrust of the Ahom state was largely at the cost of the *bhuyāns*. Even as all this was happening in the early sixteenth century, there emerged another

tribal state formation, the Koch kingdom. In course of the century, it consolidated its power over the entire western part of the region from the Karatoya to the Barnadi, all the time expanding at the cost of the local *bhuyāns*. In 1562 a Koch army marched to the Ahom capital, Garhgaon, and sacked it. But soon the kingdom was split into two – Koch-Bihar and Koch-Hajo, the latter coterminous with the western part of what is today known as Assam. The state of Jaintia that emerged by the fifteenth century in the Khasi hills and was marginally present in the plains will not be brought much into our present discussion. The state of Manipur also remains outside our scope.

By the time the Koch and the Ahom powers were posited for a confrontation, many of the disintegrated *bhuyāns* were absorbed as petty officers into the lower échelons of the new machinery, set up for mobilizing the obligatory labour services to the two states. For they constituted an indispensable élite having a formal education in scriptures, mensuration and arithmetic, and also a proficiency in the use of arms. As the *bhuyāns* never completely lost their local influence at the grass-roots, the important role they played during the thirteenth to fifteenth centuries deserves a mention here. Throughout these years, punctuated by occasional Turko-Afghan raids from Bengal, they continued to wield political authority in and around their respective agricultural estates, singly or through the formation of confederacies. Now and then a petty ruler, claiming descent from an ancient royal lineage and styling himself as '*kamesvar*' or '*kamatesvar*', demanded loyalty from them. If the claimant was strong enough, the neighbouring *bhuyāns* did recognize him as their overlord and paid homage at his court. Otherwise, they remained independent. Chandibar Bhuyān – a fourteenth-century migrant who 'commanded 80 shields' – held allegiance, for instance, to Gandharvarai, who, in his turn, was a vassal (*choṭarājā*) of the King of Kamata (*Kāmeśvar*).[1] On the other hand, his contemporary Purushottam Das, grandson of a dependent *bhuyān* commanding a thousand swordsmen, claimed himself to be independent and granted a village to a Brahmin.[2]

Most of the *bhuyāns* were high-caste migrant adventurers from north India and their descendants; only some were of local descent. Though by and large Kayastha by caste, the *bhuyān* category did not altogether exclude Brahmins, Daivajnas or Muslims. Their various surnames, such as *bhuyān*, *giri*, *rāi*, *dalai* and *khān*, suggest that they represented not merely a status group but also a class of armed land-controllers. They

[1] Anon. [173], 9–16. In the region's historiographic tradition, this anonymous compilation of the biographies of local Vaishnava saints, in Assamese prose, stands out as a distinct attempt at recording oral history as early as in the reign of King Shiba Singha (1714–44). For fuller particulars for this source and other sources to be mentioned below, see Bibliography.

[2] Rautkuchi copper plate inscription in *Prāchya-Śāsanāvalī* [40], I, 138–41.

moved to virgin lands to set up their new homesteads and cultivation; they provided protection to their dependent neighbours against the Bhot and Kachari incursions; and they also played a leading role in the cultural life as well as in the communal dyke-building activities for water control. They, as a group, dominated the caste-differentiated Assamese-speaking mainstream of the population. This population was then a myriad-tongued tribe-peasant continuum. Except for the Ahoms, the rest of the tribal population in the plains were of Tibeto-Burman stock. The Ahoms belonged to the Sino-Tai linguistic family.

The eastern and larger part of Koch-Hajo – subjugated by the Mughals but frequently changing hands during the seventeenth century – was finally annexed by the Ahoms by 1682. The Ahom expansion as far as the river Manas became then a settled fact. It was therefore in course of the seventeenth century – the century of Ahom-Mughal conflicts – that the relative isolation of the region was breached and the economic impact of the outside world began to be felt. In this changing political setting, the region's overall production activities and trade could not but undergo slow changes in diversity and volume, if not also in quality.

In fact, the process of state formation within a tribe could have had started only when it had, to a considerable extent, moved from shifting to permanent cultivation, with or without the use of the plough. For a quantum of surplus was necessary to maintain even a rudimentary state apparatus. The subsequent process of political consolidation over the centuries was coterminous with the twin processes of social consolidation through progressive sanskritization and of economic consolidation through market links. The invasion of the plough in pockets of hoe and digging-stick cultures meant an extension of the wet rice (*sāli*) cultivation at the cost of that of dry rice (*āhu/āus*) and of the transplantation technique in preference to the broadcasting of seeds. The package changes in the rice economy ensured an increased productivity, thereby giving sustenance to the rising population and to the state apparati.

Technology of wet-rice culture

The prevailing modes of cultivation and their mix were largely a group response to the varying ecological conditions. In the rainfall-rich region, liberally dotted with forests and swamps, hunting, fishing and other gathering activities continued to play more than a marginal role. Yet it was the rice economy that really mattered, and it underwent improvements. Of the two major varieties of rice, *āhu* was a short-maturing one which was sown broadcast. It needed no standing water and, hence,

also no ridges (*āli*) built into the fields.[1] *Sāli* was a more productive, long-maturing variety that needed wet conditions and transplantation. Slope being an important factor for consideration in rice culture, wet rice needed such fields – (i) as could be flooded artificially from adjacent streams as and when needed, or (ii) as could be reduced to a dead level so that it could retain the rainwater.

The first was a technique of gravitational irrigation with its applicability limited only to sloping submontane tracts watered by hill streams. It involved the throwing up of dams across the hill streams in their upper reaches and leading the stored-up water to the fields through a network of dug-out channels. The Kacharis were adept in this technique. The existence of such irrigation works in thirteenth-century Assam appears to have been noticed both by Minhāj and the first Ahom settlers.[2] The second technique suited the extensive central alluvial flats, made up of clayey soil, once these were cleared of deep-rooted forests. It involved surfacing of the soil and raising of low ridges in a criss-cross pattern so that the field was divided into a number of 6- to 10-yard rectangular blocks, and the rainwater could be held in the right quantity and let out when needed.

The grassy banks and islands of the Brahmaputra, being sandy and exposed to annual inundation, were unfit for any kind of permanent cultivation. So were large parts of the undulating plains and submontane tracts where the slope remained an inhibiting factor. Most of these areas were suited to the growing of the *āhu* variety of rice only, even after the hoe or the digging-stick was replaced by the plough. In the region's agrarian history, improvements did take place over the period, but without driving out the old techniques into total obsolescence. The tribal factor and the given ecology were largely to explain this phenomenon.

In the thirteenth century, the Ahoms and the non-tribal population in general were associated with the wet rice (*sāli*) culture of the central plains. Some advanced sections of the tribal population, like the Kacharis, also marginally grew wet rice of another variety in the submontane tracts. This variety was *kharmā āhu*, which was irrigated but not always necessarily transplanted. At the same time, all ethnic

[1] Low built-in ridges, criss-crossing the rice fields and breaking the monotony of their flatness, are crucial to the wet-rice technology. The ridges are generally not higher than a foot and help retain the water in the fields, as will be explained in the text. Every peasant takes care to raise such low ridges in his field and keep them undisturbed while ploughing. Dykes or high embankments, on the other hand, are collectively built and managed instruments of general water control, on a big scale. These can also be used as roads. In the eleventh-century copper-plate inscription of Indrapāla, there is a reference to *Kṣetra-āli* meaning field-ridges as well as to *bṛhat-āli* meaning big dykes or embankments – *Journal of Asiatic Society of Bengal*, 66 (1897), 113–32.

[2] Niẓāmī [135], 762–6; *Deodhai Āsām Burañji* [176], 100; Guha [330], 144–5.

groups without exception had also a varying interest in the dry *āhu* culture. In course of the subsequent centuries, the Ahoms played a significant role in widening the base of the wet-rice culture of the *sāli* variety in the extensive and undulating plains of eastern Assam. Apparently, the iron implements they had for reclamation and surface-levelling work were relatively more efficient and abundant than their neighbours'. For they had direct access also to supplies from upper Burma across the hills. Their use of buffaloes as the major source of animal power, as in south-east Asia, was another factor that contributed to their efficiency in bringing wastelands under the plough. However, their main strength lay in the traditional Tai militia system they shared with their kinsmen in Thailand and Vietnam. Such a militia had to render service to the state for all public purposes in war and peace. Next to defence, the most important function of this militia was to build and maintain an infrastructure for the wet-rice economy.

Role of the Militia in Rice Culture

The militia was employed to reclaim cultivable lands from forests and swamps. These were then systematically settled with the surplus population from older habitations. Hundreds of miles of river embankments, crossed by high raised pathways and joined by smaller bunds graduating down to and connecting the villages and fields, formed a network that helped retain or keep out the inundations. These massive works, built up mainly in course of the fifteenth to the seventeenth centuries, remained unparalleled elsewhere in the region. The land surface was also caused to be levelled up with particular care. 'In this country they make the surface of the field and gardens so level' wrote Shihābu'ddīn Ṭālish in the 1660s 'that the eye cannot find the least elevation in it up to the extreme horizons'.[1] The reference was obviously to the Ahom part of the region, i.e. eastern Assam where *sāli* accounted for an overwhelmingly major part of the rice production.

In course of the popular Vaishnava movement since the sixteenth century, a network of monasteries (*satra*) – these numbered more than a thousand around 1700 – came into being. These institutions also took part on their own, and independently, in the reclamation of wastelands for cultivation, while pressing their claims for an exemption of all monks – both celebate or married – from obligatory militia services to the state. The monks evaded such services as and when they could, by paying fines or otherwise. At one stage the state tried to suppress a large section of the monasteries, seize the monks and send them to labour camps to build roads and embankments. In due course, the Ahom state,

[1] Ṭālish [159], tr. Sarkar, quoted in Gait [312], 141.

however, changed its policy and, during the seventeenth and eighteenth centuries, endowed a number of these monasteries with grants of revenue-free wastelands and serfs by way of encouragement to their autonomous growth. The response of the Koch kings towards the monasteries was the same.

The Ahom militia organization was so intrinsically integrated with the economy at large that it deserves some elaboration. With the exception of the attached serfs, slaves, priests and men of noble birth, the entire male population in the 15–60 age-group was deemed to constitute the militia. They were known as *pāiks* and were organized by *gots* (units) – each consisting of four adult males and jointly held responsible for one man-year of service to the state.[1] One member of each *got* was obliged to report for duty, in rotation, at appointed places 'for such work as might be required of him, and during his absence from home, the other members were expected to cultivate his land and keep him supplied with food'.[2] In times of an emergency like war, the second and even the third member of a *got* might be called up, at one and the same time, even to the detriment of their household agriculture.

Each *pāik* household had access to common lands such as forests, grazing grounds and fisheries. Besides, it held in private occupation three types of land: (1) homestead and garden lands suited to growing bamboo, areca-nuts, betel-vines and sugar cane, vegetables, fruit-bearing plants, lac, silk, tobacco, jute or some such crop; (2) inferior lands suited to fluctuating plough cultivation of *āhu* rice, mustard-seeds and pulses; (3) wet rice-lands. For the first two categories of landholding, the *pāik* had no obligation to the state. Subject to a degree of clan control, homestead and garden lands were treated as private property. Inferior lands going periodically to waste were hardly claimed as permanent private property under the given conditions of land abundance. A household could get hold of as much of such lands for use as it could manage. On the other hand, all wet rice-lands were deemed to belong to the state. As against his service obligations to the state, the *pāik* was entitled to enjoy a delimited plot of wet rice-land, free of all taxes and subject to redistribution from time to time. Since the seventeenth century, the size of this allotment used to be, generally, 2.66 acres; and in Kamrup where the average quality of wet rice-land was inferior, 4 acres. Incidentally Kamrup, representing new conquests in the seventeenth century, was the westernmost district of the Ahom dominions.

Even as late as the early sixteenth century, this basically tribal system of manpower utilization was not sufficiently coercive and, hence, had its loose ends. 'Some Ahoms complied with, some did not. Only the conquered subjects', a chronicler lamented, 'perform whatever work

[1] Originally, each household contributed one militia man (*ghar muri e povā*).

[2] Gait [312], 239.

is given to them'.[1] It was in the reign of Pratap Singha (1603–41) that a degree of coercion and sophistication was introduced into the reorganized militia. It was then split horizontally into a number of functional/localitywise divisions called *khel*, each with a hierarchy of officers – the lowest among them holding the charge of 20 *gots*. Under the reorganized system, each individual *pāik* served the state for a stipulated period of three months in the year. *Pāiks* of good birth were not expected to do manual labour or to fight as common soldiers; they therefore rendered non-manual services, in accordance with their respective skills, aptitudes and status. Separate functional *khels* were also organized for such non-manual services. Craftsmen contributed, in lieu of labour, a fixed portion of their respective products to the royal treasury. Again, some of the *khels* were engaged in cultivating crown lands or working in royal *kārkhānas* and granaries. Tribal cultivators of the marches, not using the plough, were not within the purview of, or integrated into, the system.

This system worked in such manner that one-fourth to one-third of the militia were always available in readiness for such work as might be required of them. Since ministers and officers were not salaried, they were provided during their tenure with cultivable lands and a quota of servitors (*likchau*) from the *pāik* units they commanded, as their perquisites. So miserable were the conditions of these *likchaus* as unpaid labour for a limited period that they often preferred to pay their officers heavily in cash or kind to escape the ordeal. Besides, the bigger officers – all noblemen – had their ancestral estates, slaves and serfs which were their private feudal properties. The traditional practice of land grants to Brahmins, temples and religious institutions in the region was initially discontinued by the Ahoms. However, from the seventeenth-century onwards they, too, fell in line. They created, on an extensive scale, large private feudal properties in favour of the above-mentioned categories as they had done earlier in favour of the nobility in office. In that process, a sizeable portion of the *pāiks* were transferred from the state's jurisdiction to that of the lords temporal and spiritual so that the latter could exact labour-rent directly from them. Private feudal properties also existed in the Koch territories, later preserved also by the Mughals.

Details of the militia system as it functioned in the non-Ahom territories are not available. In the Koch and Kachari kingdoms – and also in the neighbouring kingdoms of Jaintia and Manipur – a somewhat simpler system of exacting compulsory militia service from the subjects

[1] *Sātsari Āsām Buranji* [181], 21. The Ahom rulers introduced the practice of writing chronicles (*buranjī*) for record. Many of these, written in Tai or Assamese language, are now available in edited, printed versions.

was resorted to. But the basic quasi-feudal nature of the system remained the same, with a striking resemblance to similar systems in medieval south-east Asia.[1]

The Mughal Impact

With the imposition of the Mughal revenue administration on the Koch territories and the increasing role of money in economic life since the close of the sixteenth century, profound changes began to take place not only there but also in the adjacent Ahom kingdom. The Mughal administration demanded revenue in cash from the *pāik* allotments in lieu of the traditional militia service. From a larger part of Koch-Hajo, the Ahoms ousted the Mughals but basically retained their land-revenue system. In the Ahom territories, relatively affluent *pāiks* had already been looking forward to commutation of their service obligation into an in-kind or cash payment. This was increasingly conceded.

Only a manpower census, and no land survey, used to take place from time to time in the Ahom state. Such a census dated 1510 is the earliest to find a mention in local chronicles.[2] It was not the custom of the Ahoms to take any land tax from the cultivators but 'in every house one man out of three', as Shihābu'ddīn Ṭalish observed, had to render service to the rajah. 'If this country were administered like the Imperial dominions' he estimated, 'it is very likely that forty to forty-five lakhs of rupees would be collected from the revenue paid by the raiyats, the price of the elephants caught in the jungles and other sources'.[3] This way of thinking had not left the Ahoms unaffected. Impressed by the Mughal land-measurement system, they started a countrywide detailed land survey and almost completed it during the years 1681–1751. In that process, attempts were made to detect taxable wet rice-lands held in excess of the prescribed *pāik* allotments and to explore new avenues of taxation, while keeping the militia system basically intact. Surveyors were brought from Koch-Bihar and Bengal. Selective commutation of labour service obligations for cash was also in progress. By 1663 both pineapple and tobacco, contributions from the New World, were under cultivation in the region, and both had potentialities as cash crops.

By the end of the sixteenth century, some types of land had definitely acquired a saleable value in the western parts of the region, though land sales were still rather unusual. The author of *Kathā-guru-charita* casually refers to three such transactions related to the purchase of homestead plots taking place in the sixteenth century.[4] In the next century, the fact

[1] Thompson [530a], 292 ff.; Dang Nghien Van [537], 188–93.
[2] Gait [312], 86.
[3] Gait [312], 143.
[4] Anon. [173], 87, 142 and 263.

of land purchases actually taking place in the same area is corroborated by several extant documents. Three of them – dated 1667, 1685, and 1723 respectively – strictly belong to our period.[1] The first is a *sanad* issued by Emperor Aurangzeb in favour of two temple priests of Pargana Pandu. Though not a sale deed, it mentioned the market price of the land donated. The second and third were actual land transaction deeds, in each of which a high-ranking nobleman in office featured as the purchaser. The third document recorded the purchase of a 9-acre plot, suited to both orchard and rice cultivation, at the price of Rs. 25 from some villagers of Maligaon, Pargana Dehar. The place of transaction, names of witnesses present and boundary demarcations were mentioned in the document. All the places mentioned in the above documents, however, related to western Assam – the present district of Kamrup to be more precise. It appears that in eastern Assam private land-rights, even when recognized as saleable, remained inseparably linked with over-riding clan and community rights down to the British days beginning 1826.

II THE CASTE-SOCIETY AND DIVISION OF LABOUR

Ecology and Society

Throughout the historical period the Brahmaputra – the region's life-line flowing between soft, sandy banks – was also ruthless to its vicinities all along its course. Though favoured with westerly winds, its navigation in the rainy season was hazardous and dangerous for boats other than canoes, because of floating trees and the difficult tracking along its jungle-covered banks. Village settlements followed, therefore, a linear pattern along the banks of its tributaries rather than nucleating on the banks of the Brahmaputra itself, except for a few sites protected by natural rocks from its vagaries. Clusters of such hamlet-type settlements were, more than not, separated from each other by jungles and swamps, infested with wild animals including herds of buffaloes, elephants and deer. Under the circumstances, if political developments were at a level different from those in the north Indian plains, society and economy, too, had their distinguishing features.

The nucleated village of the classical north and south Indian type, with village servants integrated with a dominant caste-group within it through *jajmānī* relations, was as conspicuously absent in north-east India as it is now. An attempt was made by King Pratap Singha (1603–41) to found new villages settled with several caste-groups including

[1] Bhuyan [171], 18, and [54] copper-plate inscriptions No. 50 and No. 28, Record Room, Assam Secretariat, Shillong Gauhati.

artisans in eastern Assam. The attempt, however, apparently failed to give a different direction to the village settlement pattern. The brotherhoods that developed on the basis of functional *khels*, institutionalized by the same king for administrative convenience, largely inhibited the growth or autonomy of village communities. Only in some pockets of western Assam could one come across a semblance of big multi-caste caste villages – that, too, not frequently, and never were they oriented to *jajmānī* relations.

In general, caste rules were less rigorous, less specialized, less elaborate and less inhibiting in the region than elsewhere. For example, there was no taboo against Brahmin women's participation in the sowing and harvesting operations in rice-fields or in weaving. Many of the Brahmins were agriculturists; though, for the ritually inferior act of ploughing, they had to depend on others. The caste society was open-ended at its bottom, liberally admitting not only individual entrants but also whole tribes – Koch, Ahom and Chutiya, for instance – as new castes through proselytization. The Vaishnava monasteries played a significant role in this respect. This steady process of detribalization over the centuries also meant, *inter alia*, the proselytes' adoption of mud-plinth dwellings in place of pile-houses, of the caste society's dominant language in place of a tribal dialect and of the plough in place of the hoe or digging-stick. Tribalism nevertheless died hard since fresh groups of tribal hillsmen continued to come down and settle in the plains, thereby somewhat neutralizing the process.

It is difficult to say to what extent trade, crafts and money circulation prevailed in the region during the thirteenth to fifteenth centuries. No local coins of the period, if any, are extant; the only coins extant are those minted and left behind by the Turko-Afghan raiders. Nor are there inscriptional references to coinage or to the use of money to fall upon. It is highly probable that imported cowries (conch-shells) continued to be in circulation. For we find cowries being referred to as money in an earlier inscription.[1] Barter nevertheless remained the main form of exchange, alongside of the use of cowries and Bengal coins coming into the region through trade.

Village self-sufficiency in a total sense was a myth even in those times. Salt had to come from the brine springs of the surrounding hills and/or from coastal Bengal. Because of varying ecological conditions, there was a degree of micro-regional specialization in respect of crops like cotton, sugar cane, mustard seeds, lac and silk. Elephant tusks, buffalo horns, rock-salt, incense and iron were, for the most part, products of the foothills and the hills; so was raw cotton. Merchant-heroes participating in long-distance, riverine (and sea) trade with boatloads of black pepper,

[1] Sastri [39], 185–92.

long pepper (*pippali*), incense, ginger, mustard seeds, cumin seeds and nutmegs etc. provided a popular theme for the sixteenth-century Assamese literature. This suggests existence of such trade in a near past. We learn from Minhāj that a regular supply of horses used to reach Bengal from Tibet (and Bhutan) via Kamrup in the thirteenth century.[1] Trade links between eastern Assam and upper Burma, and probably also south China, were maintained across the hills throughout the thirteenth to fifteenth centuries.

Money and Trade

From the late sixteenth century onwards, information is more detailed about the region's economic conditions; there is no longer any doubt about some growth taking place in trade and crafts and some advance being made towards monetization and specialization. The first batch of local coins of our period were gold coins issued by an Ahom king in 1543. No Ahom coins were further issued during the century; but the Koch kings since 1555, and the Kachari and Jaintia kings thereafter, took to regular coinage to fill the vacuum. The Ahoms also resumed minting again in the mid-seventeenth century. By 1663 their currency consisted of gold coins, silver rupees and cowries. By the end of the century half-rupee and quarter-rupee silver coins, and by 1750 also one-eighth rupee and one-sixteenth rupee coins, were extensively in circulation throughout the region. The standard Ahom rupee-coin weighed two-fifths of an English ounce; and, in the absence of a copper coinage, cowries met the needs of petty trade. The rapid increase in money supply from several sources indicated that the demand for media of exchange and trade, both intra-regional and inter-regional, were increasing over the years 1500–1750.

Some idea of the trade conditions could be derived from *Kathā-guru-charita*, since a number of sixteenth-century Vaishnava saints, whose biographies this book contains, had participated in trade as youngmen. The author classified merchants (*mudai*) into three categories – (i) shopkeepers dealing in gold and jewels, (ii) those dealing in a variety of silk and cotton fabrics and (iii) those dealing in commonplace articles like salt and *khār* (an alkaline substitute for salt, prepared from vegetable ash). The first two categories dealt evidently in luxury goods and the third, in necessaries. Big or small, the merchants of the region were men of modest means by north Indian standards. The scale of operations, casually mentioned in this source, was of the order of Rs. 1 lakh or so in several cases; in one place, a credit of Rs. 4 lakhs is mentioned in

[1] Sirāj [136], 567–8.

course of a story. No particular caste specialized in trade. There were *inter alia* some Kayastha and Brahmin as well.[1]

Traders seasonally formed temporary partnerships to trade in distant markets with boatloads of local products and returning with cargoes for sale. On completing the return voyage and sales, the profits were shared and the partnership was dissolved. Commodities involved in trading were mustard seed, areca nuts, betel-leaves, ornamental umbrellas, made of bamboo and *takaupat* (leaves of a plant of the palm family), knives with ornamental handles, salt, silk, black pepper, elephant tusks, and gold. Generally, the first three items procured from Koch-Hajo were offered for the remaining items of the above list obtainable in the Ahom kingdom.[2]

Traders sometimes specialized in a single commodity like salt or areca nuts. To some extent, specialization in the production of a commodity was achieved also localitywise. Concentration of betel-vine and areca-nut orchards in the village of Kupajhar and its vicinities, and Paralahat serving the area as a marketing centre, were noted in *Kathā-guru-charita*. In all local *hāṭs*, which were weekly or bi-weekly markets, one could purchase betel-leaves, areca nuts, earthen wares, piece-goods etc., but presumably not a very wide range of goods. Surprisingly, there was only a small daily bazaar on a narrow street in the Ahom capital of Garhgaon in the 1660s; and the only sellers who sat there, as Shihābu'ddīn observed, were betel-leaf sellers.[3] However, women vendors, amongst others, brought head-loads of various provisions for sale to Nazirahat, located outside the city gates. This we learn from *Kathā-guru-charita*.

Village potters used to go out with boatloads of their earthen wares for barter. Some villagers in their old age eked out a living by making a variety of bamboo baskets, fishing appliances and containers and by locally bartering these for salt, oil, areca nuts, rice and such other necessaries of life. The author of *Kathā-guru-charita* also noted occasional sales by them of vegetables, mustard oil and wood fuel.[4] Thus, for the most part, exchange was intra-local on a petty scale and at a peddling level, within the limitations of a basically barter and cowrie economy. In such an economy the sellers were often themselves also the producers or gatherers of the goods sold. When not, they generally had their goods procured directly from the producers, in villages accessible by boats rather than through intermediaries. Besides, big or small, the traders did not break their links with agriculture. Bullock carts were not in use; nor were bullock caravans.

Let us take the career of Bhabānanda Kalitā (born *c.* 1495) who was described as a *bar-sadāgar* or big merchant. He was born in an affluent

[1] Anon. [173], 65, 142, 241, 349, 492–3.
[2] Anon. [173], 82–89; Dwija [180], 29–30.
[3] Anon. [173], 65, 82–7, 197; Gait [312], 150.
[4] Anon. [173], 123, 244, 250, 307, 331.

agricultural household consisting of fourteen members, including a bondsman or two. Jointly with his uncle, he owned a large boat and several head of cattle and buffaloes. While migrating to a new village, with all their moveable properties, young Bhabānanda and his uncle lost everything – even their family – in a boat-wreck. However, in course of his assisting a betel-leaf vendor in a *hāṭ* and, later, of participation in that trade, Bhabānada made a small fortune of 640 cowries (normally equal to half a rupee). Through gambling this was augmented to Rs. 4. In partnership with a friend he then took to goat-breeding and further improved his pecuniary position. In partnership with six friends, he now took to riverine trade. Gradually he became a boat-owning merchant dealing mainly in mustard seed. Based in the Koch kingdom, he used to travel as far as and beyond the frontiers to trade with men from the Garo hills, Bhutan, Mughal Bengal and the Ahom kingdom. His evasion of the Koch customs duties having been once detected, he was finally granted tax-free privileges all over the kingdom. In his old age, he was well settled in his farmhouse, with agriculture carried on by bonded or slave labour and his resources committed to the cause of the Vaishnava movement.[1]

We know also of other enterprising Assamese merchants who took their trading boats as far as Dacca or followed an overland trade-route across the Jaintia hills to Sylhet to trade with Bengal in the early seventeenth century. The Assamese diplomatic envoys, visiting Tripura thrice between 1709 and 1715, noted important trade-centres and local produce they found on their route – obviously with an eye towards trade promotion. Their written accounts are extant.[2] A chain of foothills markets – such as Nagahat, Borhat, Kacharihat, Rahahat, Gobhahat, Ranihat and Phulagurihat – facilitated regular trade between the plains of the region and the hills of north-east India. Raw cotton and iron of the hills, in particular, were exchanged for rice, dried fish and cotton and silk fabrics of the plains.

There were regular trade relations between Mughal India and the Ahom kingdom, except when such relations remained suspended on diplomatic grounds. The Mughal administration had an insatiable demand for live elephants and *āgar* (*acquilaria agallocha*) or aloes-wood. The normal agency for procuring elephants was, however, not the traders. For elephant catching was a highly labour-intensive sophisticated enterprise, necessarily organised at the state level. A golden-hued silk variety of Assam, *mugā*, was an article of trade in Bengal as well

[1] Anon. [173], 79–101.

[2] Bhuyan [176], 120; Kandali and Kataki [182], 21–3 and 29–33. The Assamese envoys noted the sale of tobacco leaves in a market centre (*ganja*) in Tripura in 1711. Tobacco as a local product in central Assam around 1615 is mentioned in: Bhuyan [176], 110.

Table 15. *Mughal–Ahom trade*

Exports from Bengal into Ahom state			Imports from Ahom state into Bengal		
	Quantity (1,000 maunds)	Value (Rs. 1,000)		Quantity (1,000 maunds)	Value (Rs. 1,000)
Salt	35.0	192.5	Stick-lac	10.0	35.0
Ghī (clarified butter)	1.0	1.6	Raw cotton	7.0	35.0
Fine pulses	–	0.8	*Mugā* silk	0.1	28.9
Sugar and spices	–	2.0	Mustard-seeds	15.0*	20.0
Copper	–	4.8	Ivory	–	6.5
Red bead and paints	–	1.5	Bell-metal vessels and iron hoes	–	2.1
Stone beads, coral, pearls and jewels	–	8.0	Black pepper and long pepper	0.1	0.8
European glassware, cutlery and woollens	–	2.5	Indian madder	–	0.5
Muslin	–	10.0	Thaikal (?) fruit	–	0.1
Other luxury fabrics	–	4.5	Slaves (100 persons)	–	2.0
		228.2			130.9
Cowries		0.1	Gold and silver		97.4
		228.3			228.3

* 140 maunds including 75 mds of Muga cloth (*dhoti*).

as the Coromondal and Malabar coasts in the early seventeenth century. Every year in normal times, wrote Shihābu'ddīn, quantities of aloes-wood, pepper, spikenard, musk, gold and a variety of silk were offered in exchange of salt, saltpetre, sulphur and several other products of Mughal India at the Ahom–Mughal check-post.[1]

The composition of the Mughal–Ahom trade could be roughly comprehended for the first half of the eighteenth century from the earliest available estimates, based on the customs check-post returns of the year 1808–9.[2] These are tabulated in table 15 with a caution that the Ahom kingdom was not even half as populous then as it had been around 1750. Nevertheless, the figures are valid for our purpose in their ordinal magnitudes.

The trade pattern, as indicated above, and by Shihābu'ddīn earlier, suggests that the merchandise trade surplus was generally in favour of

[1] Gait [312], 144.

[2] Sharma [174], 45–6.

Mughal India. In other words, the bullion inflow from Europe into India did not enter the Ahom dominions. Secondly, salt accounted for an overwhelmingly larger part of the imports into the Ahom state. Around 1750, the total salt imports from Bengal were about 120,000 maunds.[1]

Unlike the trade with Bengal, the region's trade with Tibet and Bhutan was favourable, the outstanding balances being settled with gold and silver. The latter countries offered rock-salt, woollens, gold dust, horses, yak-tails (*chāmar*), musk and Chinese silks in exchange for lac, dried fish, cotton and silk fabrics and, perhaps rice and iron. The bulk of this caravan trade was between the Ahom kingdom and Lhasa and was negotiated at a place in the foothills. The total value of this trade was estimated at Rs. 2 lakhs in 1809.[2]

The range of trading activities at various levels, as surveyed above, was extremely small because of two serious limitations: (1) the surplus largely taking the form of labour-rent/rent-in-kind for direct appropriation by the ruling class and (2) the household consumption needs of rice, cloth and oil being almost entirely satisfied by production within the household itself. There was no organized grain market, nor was there a vertically and horizontally organized chain of intermediaries to intervene in the market. 'The inhabitants store in their houses one year's supply of food of all kinds, and', wrote Shihābu'ddīn 'are under no necessity to buy or sell any eatables.' In March 1662 the invading Mughal army found in the capital city of Garhgaon 1 to 10,000 maunds of rice stored in each of about 170 granaries, all presumably belonging to the state and the rich nobles.[3] Yet under the Mughal impact things were surely changing. We find in three extant copper-plate charters, dated 1739, 1743 and 1755 respectively, normal prices being quoted for a range of food articles like rice, pulses, *ghī* (clarified butter), salt, oil, areca-nuts, betel leaves, ginger, milk, jaggery (*gur*) and black pepper as well as incense and earthen vessels for regular future purchases to be made by certain temples.[4]

All said, one has to note that big bankers, insurers, *ṣarrāfs*, brokers and all that paraphernalia of a developed money economy were conspicuously absent in the region even by 1750.

Crafts and Technology

Because of the limited growth of trade, the division of labour – both in terms of the number of castes and in terms of the actual occupational specialization – was extremely stunted and remained more or less so

[1] Gait [312], 217.
[2] 'Ahom and Assamese Chronicle' [174], 73–4; Nathan [154], 677.
[3] Gait [312], 134, 150.
[4] Neog [40], 45–57, 177–80, 184.

until the end of our period. Weaving and spinning were not caste-specific professions, and professional weavers were not many. There was no separate oilmen's caste either. Weaving, oil-crushing, rice-pounding, basketmaking and a number of other crafts were carried on largely within the households. It was only in Kamrup that one could come across a village or two entirely settled by oilmen or weavers; but they, too, had agriculture as a secondary occupation.

The Kalitā caste, essentially peasant in orientation, permitted its members also to form diverse occupational groups such as those of wheel-using potters, blacksmiths, goldsmiths, bell-metal artisans, carpenters and boatbuilders, and weavers. The groups tended to become sub-castes, but finally did not. Among the despised castes reduced to untouchability were the Hirās who fashioned earthen pots without using the wheel; the Brittials who were goldsmiths; and the Nadiāls who were net-using fishermen. The Moriās – Muslim settlers originally coming as prisoners of war – were braziers, making utensils out of brass sheets; they were looked down on because of their addiction to drinking. Artisans and fishermen were not necessarily delinked from agriculture.

It was but natural that in a timber-rich region, the art of carpentry would be highly skilled. The timber palace at Garhgaon built by 12,000 men in one year, according to Shihābu'ddīn, impressed him because of its exquisite woodwork.[1] The numerous locally-built war-boats of the Assamese also impressed the Mughals for manoeuverability. The technology employed in boatbuilding was, however, primitive. Large clinker-built sailing-boats were difficult to sail on the Brahmaputra and its tributaries. Hence it was the dugout canoe with easy access to both, that was perfected for use in local waters.

The traditional boatbuilding technique, surviving till recent times, deserves a mention here. Roughly hollowed logs, with their insides scraped out until the thickness of the outer skin was reduced to about an inch and a quarter, were smeared with liquid mud and were placed inverted over a line of burning embers. Thus subjected to a steaming process and softened, the boat was widened by insertion of thwarts. If it split in the process – and usually it did – the rent was patched with a piece of wood fastened in by clamps. In this process boats with a width of 6 to 7 feet and a length of 60 feet could be built, with a maximum burthen of 30 to 35 tons.

No mills were used for producing oil at the household level. Two flat boards and a stone-loaded small beam were all that was used for the purpose. Only the professional oilmen – not many in number – used the cattle-powered mill. Such a mill was also used for sugar cane

[1] Gait [312], 150.

crushing. The dominant technology in weaving did not differ much from what commonly prevailed elsewhere in India.

Mineral production was an important economic activity. Gold used to be obtained from river sands by members of the Sonowal (gold-washer) Khel – a multi-caste guild – working in groups. In Shihābu'd-dīn's times, 10 to 12,000 Sonowals were engaged in gold-washing, and they paid to the raja a *tolā* of inferior gold per head per year, which fetched a price of Rs. 8 or 9. All the four alternative methods employed in gold-washing involved a tedious process.[1]

So were the methods of manufacturing salt. There was a chain of brine springs along the hill ranges close to the foothills. At these places wells were dug to a considerable depth. Joints of large bamboos, opened out so as to resemble canoes, were filled with brine and placed side-by-side over a very long water-filled earthen trough used as a boiler. Wood fuel was burnt for the purposes. In this rude way, the brine in the bamboo joints was evaporated until salt was formed. This salt was more expensive than imported Bengal salt.[2]

Close to the brine spring sites, there were also beds of clay iron-ore which were worked heavily in the medieval times. Mining was carried on often to the depth of 24 feet to obtain this clay iron. It was then cleansed of its impurities by washing and was finally melted in small clay furnaces. In a working team, for every five men engaged in smelting there would be about five times the number for preparing the ore and charcoal. The whole group was headed by a master craftsman (*ojhā*) who put the ore and fuel into the furnace and drew out the lump iron from it. Assamese furnaces were less efficient than those in use in the Khasi hills, worked by double bellows.[3] The iron and iron manufactures from Jaintia and other parts of the Khasi hills had a big market in medieval Assam.

While technology in general was backward, metalworking in smithies was not so. Expert Muslim artisan recruits from Mughal India were organized into a separate *khel* or guild. Metal-casting processes were used for making articles of gold, silver, bronze, bell-metal, brass and iron. According to Shihābu'ddīn, the Ahoms cast excellent matchlocks, and made first-rate gunpowder and artillery pieces. Tavernier agreed with him. However, he wrongly credited Assam with the discovery of gunpowder and guns. In fact, firearms and gunpowder were introduced in Assam in the early sixteenth century.[4] The Royal *kārkhānas* in eastern Assam apart, there was one village of metalworkers in Kamrup, Sarthebari, that was known for its skill in metal-casting. The impact of Mughal India facilitated the introduction of some new crafts like

[1] Gait [312], 143; Maniram [403], 621–8.
[2] McTosh [398], 208; Gait [312], 142.
[3] Robinson [468a], 34–5; Hannay [357], 330ff.
[4] Gait [312], 94–5, 148.

brass-casting, tailoring and the manufacture of rose perfumes and granulated sugar.

Many artisans were engaged in the royal *kārkhānas*. Others worked to private orders with raw materials handed in. The *Kathā-guru-charita* introduces us to an indebted and poor weaver who charged a piece-rate of 80 cowries per cubit of cloth woven, with yarn supplied by the customer. A little pilferage of the customer's yarn was also part of his practice. Later, on the advice of a Vaishnava preceptor, he stopped pilfering and became known as an honest, hard-working weaver. Soon, freed of all debts, he became affluent providing small loans to others. There were also more affluent master weavers (e.g. one described in the sixteenth century as *tantrī-kula-kamala*, i.e. a lotus in the guild of weavers) counted amongst patrons of literature and religious reformers.[1] Weavers and other artisans often had their respective guilds and guild-masters (*dalai/ojhā/maṛal*). Journeymen were known as *pāli*.

To sum up, the uneven development of technology over a range of crafts stemmed from a semi-tribal economic base, a small quantum of surplus in circulation and a relative scarcity of basic metals like iron within the region. A minimal use had to be made of whatever iron was available for purposes other than those of weapon-making. As a result, simple bamboo and wooden implements continued to be used in most crafts and agriculture, while manual skill was raised to a high level of perfection to achieve the desired ends. Natural factors also came in the way. Wheeled carriages were not in use because the heavy rains for about eight months in the year made the roads unfit. The region being earthquake-prone, there was no appreciable development in the art of building with bricks; nor was the ancient art of building with sculpted stone slabs appreciably revived.

III POPULATION AND URBAN CENTRES

The size of the population at different times until 1872 is anybody's guess. However from around 1500 to 1770, one comes across definite signs of a demographic growth in the region, in the wake of improvements and expansion of the rice economy. This was evident from the continuous attempts made by the state and the Vaishnava monasteries (*satra*) at setting up new villages in areas remote and desolate. Surplus population was drawn from older habitations to these new villages. Other indications of the growth were to be found in an increasing adoption of labour-intensive cultivation methods and a steady flow of in-migration. Under the given conditions of land abundance, the

[1] Anon. [173], 393; colophon of Ananta Kandali in *Bhāgavata-purāna* cited by Neog [439], 114.

region's population nevertheless continued to remain poor in absolute terms.

The growth trend that was so obvious for a long time before 1770 in the Ahom territories, was halted and totally reversed during the next half-century. There was a terrible depopulation in course of the civil war years, 1770–1809, when half the population was wiped out.[1] Again, the atrocities committed by the Burmese occupation forces during the years 1817–25 further reduced the remaining numbers by one-third or so.[2] The census that followed British annexation of the Ahom territories in 1826 yielded in that year a count of only 7 to 8 lakhs, half of this concentrated in Kamrup lying west of the Barnadi.[3] Allowing for gaps, this figure could be revised to 1 million. Finally, the official population return for the same area in 1872 was less than 1.5 millions, even including some 40,000 born outside the province. Keeping all these facts, as well as observed variations in the size of the Ahom militia, in view, and presumably working backwards from the 1826 benchmark, local historians have estimated the mid-eighteenth century population of the area at 2.5 millions.[4] This sounds reasonable, if not a little on the low side.

Other methods could also be tried for our purposes, calculating on the basis of the militia size. In the reign of Pratap Singha (1603–41), the area lying between the Barnadi and the Manas, i.e. the district of Kamrup, was not yet included within the Ahom territories. The numerical strength of his army was estimated by the author of *Bādshāh Nāmā* at 100,000 foot, 1,000 elephant and a large fleet. On another occasion, the author of *Bahāristān-i Ghaybī* estimated it at 300,000 foot, 180 elephant and 4,000 war-ships.[5] The wide difference between these two estimates could be largely resolved by referring to the fact that the proportion of the available adult manpower pool actually called up (i.e. the effectives) could vary in accordance with the exigencies of circumstances. Besides, on the latter occasion, Pratap Singha's own forces were joined also by the displaced soldiers of Koch-Hajo.

Assuming that one *pāik* per *got* (of four members) was called up on the first occasion, and further that at least 5,000 *pāiks* were there with the elephants and the fleet, the relevant adult male population (in the 15–60 age-group) could be derived as 4.2 lakhs. It was most likely that, on the second occasion, i.e. the one noted in *Bahāristān-i Ghaybī*, two *pāiks* per *got* were called up. On this assumption and a further one that there were some 5,000 *pāiks* posted with the elephants and the fleet, the relevant adult male population could be derived as 6.1 lakhs. In yet

[1] Dewan [179], no pagination.
[2] By half, according to Dodwell [250], 558.
[3] Bhattacharya [178], 74–5.
[4] Bhuyan [232], 1–2.
[5] Nathan [154], vol. 2, 488; Blochman [234], 55.

Table 16

c. 1711	(Millions) (1)	(2)	(3)
Pāiks called-up	0.26	0.36	0.40
Adult male population	0.52	0.72	0.80
Total population*	2.08	2.88	3.20

* Adult male population multiplied by 4

another estimate contained in the *Akhbārat-i-darbār-i Mu'allā*, dated 10 December 1669, the combined strength of the infantry and cavalry under the command of the Ahoms was put at about 1 lakh.[1] The area of recruitment involved was still the same, but the total population must have undergone a fall meanwhile due to the lingering Ahom-Mughal hostilities and the exceptionally severe drought of 1665. Assuming that only one *pāik* per *got* was called up in this case, our estimate of the total adult male population for 1669 is 4 lakhs.

At this state, by using a multiplier of 4, on the basis of the observed ratio between the total adult male population (in the 15–60 age-group) and the overall total population in underdeveloped countries like India, we get 1.68 and 2.44 millions, respectively, as alternative population estimates for about 1615–20, and 1.6 million for 1669. For all these estimates, the territorial coverage was the same; the Ahoms had not yet annexed Kamrup. A further clarification may not be out of place here. The king, in theory, could call up even three *pāiks* per *got* in an emergency, but in fact he would have hardly dared do so for fear of a consequent total collapse of the agrarian economy due to manpower shortage.

Assamese chronicles provide us with clues for an exercise in population estimates also for a period when Kamrup was an integral part of the Ahom state. In *c.* 1711 King Rudra Singha (1696–1714) was seriously considering an invasion of Bengal. The militia register of his state at that time revealed that 260,000 *pāiks* could be mobilized if the combatants (*kānri*) alone were called up; 360,000 *pāiks*, if the non-combatants (*chamuā*), i.e. men meant for non-manual services, too, were called up; and 400,000 *pāiks*, if the quota of auxiliary forces contributed by the vassal chiefs were also counted.[2] According to one chronicle, two *pāiks* per *got* were alerted on this occasion.[3] Three alternative population

[1] *JBORS* [159], 189n.

[2] Sharma [174], 141.

[3] Kaudali and Kataki [182], 2.

estimates for *c.* 1711, then, follow from the above details, given the methodology already worked out by us. These estimates are given in table 16. Quite obviously, the estimate in the second column alone is relevant for our purpose. For, a sizeable section of the population is left out in the first column and, of the subjects of the vassal chiefs included in the third column, a major section belonged to the Kachari and Jaintia kingdoms. Thus, finally we have the following population estimates left for our consideration: *Ahom state exclusive of Kamrup, about 1615–20*, 1.68–2.44 million, 1669, 1.60 million; *Ahom state inclusive of Kamrup, c.* 1711, 2.88 million. Having adjusted these figures to put them on a comparable basis in point of territorial coverage for all these years and for 1826 and 1872, it is suggested that the actual population of the Ahom territories up to the Manas ranged from 2 to 3 million over the 150 years ending 1750.

For a similar demographic exercise for the rest of the region, the available data are not adequate. However, according to *Akbar Nāma*, the kingdom of Koch-Bihar, lying east of the river Sankosh, had 200,000 foot, 4,000 horse, 1,000 ships and 700 elephants.[1] Applying the same methods as above, it is suggested that the relevant population was somewhere between 1.64 and 3.28 million around 1600. For the part of Koch-Hajo lying between the Sankosh and the Manas, i.e. the area that was under the Mughals until the end of our period, we have no estimate to offer.

Quite an insignificant portion of the region's population, much less than that of north India, lived in concentrated settlements that could be called towns. Such towns were not numerous, nor were these necessarily or predominantly non-agricultural in character. Garhgaon, the Ahom capital till about 1700, was the aggregation of a number of villages, tilled fields and a walled palace complex – all enclosed together within a 3-mile wide, circular ring of live bamboo plantations. It had no market other than one which had betel-leaf sellers as its only shopkeepers. The houses were built in a scattered fashion, and every man's orchard and plough land were situated, as Shihābu'ddīn tells us, in front of his house.[2] Nevertheless, Garhgaon was also the abode of a large number of artisans attached to the royal household and *kārkhānas*; and high-quality clasp-knives were manufactured here for a wide market. The new capital of Rangpur – a brick city close to Garhgaon – was found to be 20 miles in extent and thickly populated in 1794 by Welsh. Yet its population, perhaps, never exceeded 10,000.[3]

Other important towns were all in the western parts of the region. Dhubri, Ghila, Gauhati and Hajo – each of them with a fort – were

[1] Gait [312], 64.
[2] Gait [312], 149–50.
[3] Gait [312], 216–17; estimate by Barua [228], I, 116.

referred to as *qasbas* by the Mughals. Originally a betel-nut market, and since the seventeenth-century a centre of provincial administration, Gauhati was found to be an extensive and populous town, situated on both banks of the Brahmaputra, by Welsh in 1792–4. Hajo was 'the most important town and the capital of the Kingdom of Cocho' in 1626, as it is known from the letter of a Jesuit father visiting it that year.[1]

In the populous capital of Koch-Bihar (Coochbehar), there were in the same year many bazaars which were visited by merchants from Patna, Rajmahal and Gaur. In the 1660s Shihābu'ddīn was impressed to see its streets lined on both sides with flower-beds and trees.[2] Rangamati as a town came into prominence by 1606, when it had two churches and *inter alia* a small Portuguese population; and by the end of the century it became the headquarters of a Mughal *faujdār*. The town was 2 miles in breadth and 5 miles in length and, about 1770, had nearly 1,500 houses.[3] A considerable quantity of Garo hills cotton used to enter the Bengal market via Rangamati. All these towns, as mentioned above, however, owed their importance primarily to the political factor. Only Barpeta – a cluster of artisan villages huddling together in and around the campus of a Vaishnava monastery – owed its importance primarily to crafts and the pedling trade. In 1872 and 1881 it was found more populous (13,758 souls in 1881) than Gauhati or any other town of the Brahmaputra valley. In our period, a few artisan villages like Sarthebari, Sualkuchi and Ramdia – all in Kamrup – developed, respectively, as centres of bell-metal, silk-weaving and oil-crushing industries and became trade centres.

The distribution of population over the region had discontinuities and a degree of unevenness. In 1662–3 Shihābu'ddīn observed that the habitations, north of the Brahmaputra, had greater abundance of cultivation than those south of it. Yet when marching along the south bank from Kaliabar to Garhgaon – a distance of 100 miles or so – he found 'houses and orchards full of fruit trees stretch in an unbroken line'; and 'roads, houses and farms in the same style', also from Lakhugarh to Garhgaon. He observed that from the wide embanked road – lined on both sides with bamboo groves up to the foot of the hills – there were cultivated fields and gardens.[4] Koch-Hajo, too, was 'very populous and rich' as a Jesuit father observed in 1626. These qualitative statements suggest that the north-east region in the seventeenth and eighteenth centuries was not as desolate and depopulated then as it was found to be in the early nineteenth century. However, the urban content of the population was extremely low, not even an

[1] Gait [312], 216–17; Wessels [543], 123–4.

[2] Wessels [543a], 123–4 and 316–17; Gait [312], 127 (note).

[3] Bhuyan [231], 51–2.

[4] Gait [312], 141.

estimated 2 per cent of the population being covered by the so-called towns of the region.

IV SOCIAL STRATIFICATION AND LEVELS OF LIVING

Largely based on a natural economy and lacking in urbanization, the medieval society of north-east India had basically three broad classes of people: (1) a privileged aristocracy not obliged to render any kind of manual service to the state or its nominees; (2) the peasantry – fishermen and artisan included – who were required to render such service or to pay a tax in lieu of it in kind or cash; and (3) the servile class constituted of slaves (*bandi-beti/golām/dās*), serfs (*bahatiyā*) and bondsmen (*bandhā/banduā*)[1] of several types all of whom, excepting perhaps some of the last-mentioned, owed no service to the state. They served their respective masters alone.

Artisans and fishermen were, by and large, at the same time also peasants having cultivation as their major or subsidiary occupation. The same was true of many traders as well, but not all. Some of them emerged from the lower echelons of the aristocracy. Traders and artisans had not yet crystallized into a separate and viable social group. It was only in the latter phase of our period, as reflected in the *Kathā-guru-charita*, that, under the impact of limited market opportunities, the traders and artisans tended to become distinct identities. No more in the caste sense, but in the real occupational sense.

The above classification will remain inadequate unless the role taken by each class in production is also stated. The secular aristocracy was constituted of the rajas, vassal chieftains and chief nobles. They had hereditary estates on which the slaves, bondsmen and tenants (*bilatiyā-pāiks*) carried on the cultivation. Besides, the former had a monopoly of all important offices of the state. While in office, they were given portions of crown lands as their perquisites and, to get these lands cultivated, also a number of *pāik* servitors, denominated as *likchaus*, from the state militia.

Alongside of the lords temporal, there were lords spiritual as well. The spiritual aristocracy consisted of all big holders of revenue-free land grants made in favour of three categories of grantees: (1) temple-gods (in the case of *devottar* grants); (2) religious institutions like the *satras* in case of *dharmottar* and *pīrpāl* grants); and (3) learned Brahmins (in the case of *brahmottar* grants). Throughout our period big tracts of land, with or without serfs attached to them, continued to be donated by the rulers. As in the case of the secular aristocracy, these landholdings were worked by slaves, serfs and other bondsmen as well as by dependent

[1] Men who have mortgaged their labour; debt-slaves.

peasant *pāiks* – the latter permanently transferred, together with their rights and obligations, from the register of the state militia to the jurisdiction of the respective grantees. Such *pāiks* constituted a body of tenantry. A member of the aristocracy, temporal or spiritual, was always formally addressed as *deutā* or *prabhu*, which terms could be literally translated as 'lord'.

The essence of the *pāik* system could be best comprehended with a reference to the details of its working under the Ahoms in Assam. In the lower échelons of the aristocracy, and at its margin, were the *chamuā paiks* who were not required to render manual service of any kind to the state, because of their good birth or relative affluence. In fact, many of them occupied a middle position in the socio-economic hierarchy, having no big stake in rank, power or estate-holding. They had access to the petty offices in the militia and the bureaucratic establishment, and managed to carry on cultivation with one, two, or more, slaves and bondsmen. In the sixteenth century, the household of Shankaradeva (1449–1568), a Vaishnava reformer, was said to have had a number of slaves and bondsmen.[1] Dispossessed *bhuyans*, men of so-called good castes including traders, artisans and scribes, and village headmen were largely found in *chamuā* ranks. Peasant *pāiks*, when exempted from manual service on grounds of their holding petty offices in the militia or on grounds of their caste origins, were promoted into this *chamuā* status-group. Those few *chamuās* who were freed from even the obligation of non-manual service were known as *a-pāikan* (non-pāik) *chamuā*.

The peasantry constituted the largest class with a degree of stratification within it. In functional and status terms, they were denominated as *kānri* (archer) *pāiks*. Subject to rendering service to the state or permitted to pay compensation in lieu of it, they carried on cultivation in their own holdings. Alongside of cultivation, they also carried on fishing and other collecting activities as well as craft activities like weaving, spinning, basketmaking, etc. within their own households. Timber, bamboo, reeds, thatching grass and canes were largely free forest products. These were used in the construction of houses and the making of tools, weapons, traps, ploughs, stamping blocks and pounding poles, ropes and canoes. They mutually helped each other in harvesting, housebuilding and other activities which needed more labour at a particular time than a household could provide on its own.

Peasant inequality stemmed from one or more of the following factors: (1) windfall bumper crops or a sudden loss of crops or draught animals; (2) the degree of participation in profitable craft and trading activites or in the production of cash crops; (3) the extent of availability

[1] Anon. [173], 619.

of family labour, depending on the household size and its composition; and (4) an access to perquisites of petty offices in the militia. Such inequality was often measured by the number of plough units or granaries a household owned. Most of the peasant householders owned one plough and had one granary; but some had two, and the rich had three or more.

Once affluent the peasant could purchase – as the lords did – a slave or two; but this rarely happened. More often he got the labour of a poor peasant mortgaged to him against a small loan. That the practice was well established at least since the sixteenth century is corroborated by facts on record. One of Shankaradeva's disciples was formerly a bonded labourer for non-payment of a loan of Rs. 1-worth of cowries. It is stated in the *Kathā-guru-charita* that Bhabānanda, the merchant, took pity on a bonded ploughman and got him released from bondage by paying off his outstanding debt of Rs. 5. Momai Tamuli, who rose to the rank of a minister and nobleman in the seventeenth century, was also believed to have been a bonded labourer against a loan of Rs. 4, in his early life.[1] Many such instances could be given. The labour mortgage system provided opportunities to the affluent peasants to exploit poor peasants for private gains. Incidentally, mortgage of land was not yet in vogue in our period.

The peasant generally enjoyed his land rights undisturbed. As long as he continued to fulfil his obligation to the state, he had the right also to cultivate his portion of the wet rice-lands or an equivalent portion given in lieu of it. His freedom of movement was not restricted except when on militia duty. In the case of homestead and garden lands, his rights could not easily be taken away by the state. We have the instance of an Ahom householder successfully resisting royal encroachment on his land in the sixtenth century. In another case in the seventeenth century, King Pratap Singha had to conciliate the villagers with a feast and gifts to get additional lands for his ancestral farm.[2] In due course, however, peasants' traditional rights were increasingly threatened by state claims. It was in the seventeenth century that the feudal relations emerged as a centralizing force both in the economy as well as in the polity. But at their base, the militia continued to retain much of its tribal legacy. The result was a contradiction that precipitated a crisis after 1750, not to be resolved even by a lingering civil war. In the capacity of *pāiks*, the peasants had their worst time when they had to work as allotted *likchaus* in office-holders' estates and households, with full exposure to their cruelties and extortions. It is estimated that one-fourth to one-third of the mobilized *pāiks* were allotted as *likchaus*.[3] Available

[1] Anon. [173], 101; Bhuyan [231], 17; Neog [440], 77.
[2] *Sātsari Asām Burañjī* [181], 3; Guha [331], 1, 69.
[3] Guha [331], 71.

as they were for a limited period, exploitation was more ruthless in their case than in the case of slaves. For the latter were valuable personal property and had to be preserved. Moreover, all *pāiks* including *likchaus* had to face war hazards when their turn came; but the slaves did not have to.

Under the circumstances, the militia obligations were becoming increasingly unpopular towards the end of our period. One form of protest was to evade registration as a *pāik* on attaining maturity or playing truant by bribing the petty officers. Yet another form of protest was to take refuge in a Vaishnava monastery as a monk and claim exemption on that ground. The Vaishnava movement therefore had to face oppression by the state from time to time in the seventeenth and eighteenth centuries. There were even *satras* who functioned underground with support at the grassroots. In the early 1690s, thousands of monks were dragged from their monasteries and were forced to build roads as *pāiks*.[1] It appears, therefore, that there was a correlation between the spread of Vaishnavism and the peasant protests against the imposed feudal control and bureaucratization of the militia system from above.

Slavery that prevailed in the region was both domestic and agrestic. Prisoners of war, persons purchased from the hill tribes, condemned criminals and persons born of slaves constituted a major section of the servile class. Slaves could be bought and sold. Though there was no organized market for such transactions, slaves were often an export item in the trade with Bengal, Bhutan and upper Burma, and they featured prominently in the marriage dowry of rich men's daughters. There were also instances of peasants voluntarily selling themselves or their wives and daughters.[2] No strict distinction appears to have been maintained between serfdom and slavery, in the absence of the classical form of a dehumanized slavery. Serfs and bondsmen often lapsed into conditions of slavery in course of time; and slaves, too, when attached to land, were treated increasingly as serfs, with some socially recognized rights silently acquired meanwhile. It is estimated that slaves, serfs and bondsmen constituted 5 to 9 per cent of the population.[3]

Standard of living varied both regionwise and classwise. East of the Barnadi, silk was used more than cotton clothes almost by everybody, whereas most people used cotton clothes more in the western parts of the region. Men's clothes as revealed in sculptures of the early part of our period consisted of a single unstitched cloth piece (*dhoti*) wrapped round the waist and hardly reaching the knee. The same continued to be the common wear. Women did not use any kind of veil and freely

[1] Documents cited in: Neog [40], 72.
[2] Documents cited in: Neog [40].
[3] Guha [329], 3, 233–4.

moved amongst men. About the common dress in eastern Assam Shihābu'ddīn observed:[1] 'It is not their custom to tie turbans round the head, to wear coats, trousers or shoes, or to sleep on bedsteads. They only wrap a piece of fine linen round the head, and a waistband around the middle, and place a *chaddar* on the shoulders. Some of their rich men in winter put on a half-coat like a jacket.' In the biographies of the Vaishnava reformers, one comes across frequent references to three pieces of men's clothes: (1) *bhuni* (*dhoti*) of silk or cotton covering up to the knees; (2) *pacharā* (wrapper); and (3) *dopāti* or *tanā* (double-folded scarf).[2] *Chaugā* (waist-coat), *chapkan* (long shirt), *jāma* (jacket), turbans etc. as parts of ceremonial costumes made their appearance in the royal court from the close of the seventeenth century and, later also in the *satras*.

Rich or poor, people lived in thatched houses, the greater or lesser use of timber and space making all the difference. Common people's needs were simple, and these could be by and large met from their own production and collection activities. Rice and fish – rivers and marshes abounded in fish – constituted regular items in the diet for both the rich and the poor; so did a variety of vegetables, roots and tubers both grown and collected. A majority of the people also consumed an alcoholic drink prepared from rice, though the habit was looked down upon in caste society. It appears from literary sources that the per capita intake of rice, fish, meat and leafy vegetables was higher in the latter phase of our period than in the British period. The per capita intake of salt, oil and cotton cloth, on the other hand, was obviously much less. Salt being expensive, poor people used more of alkali (*khār*) as its substitute. *Ghī* also was not a common item of food. The scarcity of salt and non-use of *ghī* as well as the excessive chewing of *pān* (betel-leaf with betel-nut) were particularly noted by Shihābu'ddīn.

The ecological balance between man and nature, maintained throughout our period, had on the whole, a determining influence on the consumption pattern and its continuity. North-east India was particularly free from any devastating famines, though frequent floods and less frequent earthquakes put the people in distress from time to time. In the years 1569, 1570, 1641, 1642 and 1665, there were partial crop failures due to locusts, droughts or floods. But famines with such virulity as one finds elsewhere in India never threatened the lives of the people of north-east India.

In the matter of using furniture and utensils, there was a different life-style for the aristocracy, but not much difference between different strata of the peasantry. Alongside of earthen pots, a few vessels made of brass, bell-metal and copper appear to have constituted the prized

[1] Gait [312], 147. [2] Anon. [173], 316; Sarma [479], 145.

possessions of many households. For sleeping, people used bamboo mats. Those who could afford it slept on a plank a few inches high (*chālpirā*), which served for a bedstead.

The aristocratic style of living was one of pomp and splendour and was marked by a wasteful use of too many servants. Noblemen and heads of *satras* used sedan-chairs (*dolā*), elephants and pleasure-boats of special make as status symbols while moving from one place to another. Less-rich men, too, emulated them within the limits permitted by the status-conscious aristocracy. As to the food in high society, we can get a fair idea from the provisions which were supplied to high-ranking guests of the state on several occasions in the seventeenth and eighteenth centuries, taking into consideration their preferences and prejudices.

An affluent household owning several plough units was also generally large, with dependents included. In *Kathā-guru-charita*, we come across a pundit who had a joint family household of 260 members and nine granaries, and a state official who had four to six granaries. Another official, working for a *pāik* unit, had on his 32-acre homestead plot a 150-member household establishment including servile and free dependents. He had also a flock of 200 goats and two herds of cattle kept by four cowherds. No more details are available about their life-style.[1]

Since money loans had emerged as a major instrument of creating and stabilizing economic inequalities, a pertinent question arises as to the rate of interest charged. From the single instance provided by *Kathā-guru-charita*, the rate appears to have been in one case 22 per cent compound or 45 per cent simple per year for a credit of Rs. 120, extended by a trader to a householder in the form of goods and remaining unpaid for seven years.[2] Insolvent borrowers who had their labour mortgaged to the creditors had to remain tied to the latter for years for settling the principal sum and the growing interest. Meanwhile, further borrowing more often than not made his release from bondage a remote possibility. Bonded labour was not treated well. One who was freed by Bhabānanda, the merchant, was reported to have complained: 'They beat me; refuse to give food and wear. What to tell about my miseries?' Slaves and bondsmen were often fed from the common household kitchen.[3] For the poorest stratum of people, the social treatment that was meted out in the medieval times remains more or less the same even today.

[1] Anon. [173], 51–3, 259–60, 317.
[2] Anon. [173], 553.
[3] Anon. [173], 101, 297.

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The bibliography is divided into two sections: Sources, and Modern Works. The section on sources is arranged on the basis of the contents of works or nature of sources. Modern works are, on the other hand, arranged alphabetically on the basis of surnames of authors. Collective works or official compilations of which editors' names are not furnished or which are better known by their titles, are assigned places in accordance with the alphabetical values of the titles (ignoring, however, the adjectives 'a', 'an', and 'the').

The abbreviations used are:

B.L.	British Library.
BSOAS	*Bulletin of the School of Oriental and African Studies.*
E & D	Elliot & Dowson, *History of India as told by its own historians*, 8 vols., London, 1867–77.
IESHR	*The Indian Economic and Social History Review*, New Delhi.
IHR	*Indian Historical Review*, New Delhi.
Isl. C.	*Islamic Culture*, Hyderabad (Dn).
JASB or *JRASB*	*Journal of* (*Royal*) *Asiatic Society of Bengal*, Calcutta.
JBBRAS or *JBBAS*	*Journal of the Bombay Branch of the* (*Royal*) *Asiatic Society*, Bombay.
JBORS	*Journal of the Bihar & Orissa Research Society*, Patna.
JESHO	*Journal of the Economic and Social History of the Orient*, Leiden.
JIH	*Journal of Indian History*, Allahabad, Madras and Trivandrum.
JITH	*Journal of Indian Textile History*, Ahmedabad.
JNSI	*Journal of the Numismatic Society of India.*
JPHS	*Journal of the Pakistan Historical Society.*

JRAS	*Journal of the Royal Asiatic Society*, London.
JUPHS	*Journal of the United Provinces Historical Society*, Lucknow.
OHJ	*Orissa Historical Journal*, Cuttack.
PIHC	*Proceedings of the Indian History Congress.*
PRO	Public Record Office.

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